CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, January 28, 1909.

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CONSTRUCTION NEWS.

Plans and Specifications on File.

(* *denotes that this work is advertised in Engineering News.*)

The following plans (P.) and Specifications (S.) are on file and may be seen at office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.	Work.	See issue.
1-30	Elevator, Vallejo, Cal.......(S.)	1- 7
2- 1	Vitrified pipe, Leavenworth, Kan. (S.)	1- 7
2- 1	Bridge, Gary, Ind......(P. & S.)	1-21
2- 2*	Water-works, Hugo, Okla. (S)....	1-14
2- 5*	Condenser, etc., Key West, Fla. (S.)	1- 7
2- 8*	Wire fence, Prescott, Ariz. (P. & S.)	1- 7
2- 8	Sewers, College Hill, Ohio (P. & S.)	1-14

List of Contracts Pending.

LIGHT, HEAT AND POWER PLANTS.

2- 1	Light fixtures, New York	1-28
2- 3	Light system, New York	1-28
2- 3	Power-house, Kansas City, Mo	1-21
2- 5	Boilers, Saskatoon, Sask	1-21
2- 5	Lighting, St. Louis, Mo.	1- 7
2- 8	Elec. equip., Columbus Barracks, Ohio	1-21
2-10	Power-house, etc., National Soldiers' Home, Va	1-21
2-10	Lighting, etc., New York	1-28
2-15	Elec. equip., Yukon, Okla	1-21
2-17	Light plant, Chicago, Ill	1-21
2-17*	Light plant, Milwaukee, Wis	1-28
2-17	Lighting, heating, etc., Richmond, Ky	1-28
2-18	Power equipment, Calgary, Alta	1-28
3- 1*	Power plant, Lethbridge, Alta	1-21

BRIDGES.

1-29	Bridges, etc., Cincinnati, Ohio	1- 7
1-29	Bridge, Laprairie, Que	1-28
1-30	Bridge, Dayton, Ohio	1-14
1-30*	Bridge, Beaufort, N. C	1- 7
2- 1	Bridge, Topeka, Kan	1-21
2- 1	Bridge, St. Paul, Minn	1-21
2- 1	Bridge, Gary, Ind	1-21
2- 1	Bridge, Greenville, Miss	1-28
2- 2	Bridges, Kingman, Kan	1-28
2- 2	Bridge repairs, McKeesport, Pa	1-28
2- 3	Bridge repairs, Toledo, Ohio	1-28
2- 5	Bridge, Cincinnati, Ohio	1-14
2- 6	Bridge repair, Richmond, Ind	1-28
2- 6	Bridges, Mena, Ark	1-28
2- 9	Bridge, Lawton, Okla	1-21
2-10	Bridge, Fort Des Moines, Iowa	1-28
2-20	Bridge work, Cleveland, Ohio	1-28
3- 4	Bridges, Paris, Ark.	12-17

BUILDINGS.

1-30	Purchase of cement plant, Toronto, Ont. (Mfg. Pl.)	1-14
1-30	Elevator, Vallejo, Cal	1- 7
1-30	Buildings, New London, Conn	1- 7
2- 1	Hospital, Los Angeles, Cal	1- 7
2- 1*	Post-office, Fayetteville, Ark	12-24
2- 1	Machinery, Ashley, Miss (Mfg. Pl.)	1-14
2- 1	Hospital, Regina, Sask	1-14
2- 1	Buildings, Industry, N. Y	1-28
2- 3*	Buildings, Binghamton, N. Y	1-21
2- 4*	Post-office, San Antonio, Tex	12-31
2- 5	Quarters, Ft. Barrancas, Fla	1-28
2- 5	Jail, Montreal, Que	1-28
2- 8	Post-office, Clarinda, Ia	1- 7
2- 9	Stable, Ft. Myer, Va	1-21
2- 9	Plans, etc., Weatherford, Pa	1-28
2-10*	Quarters, New London, Conn	1-21
2-10	Bank, Philadelphia, Pa	1-21
2-11	School, Dulce, N. Mex	1-28
2-12	Library, Cleveland, Ohio	1-28
2-15	Post-office, Shenandoah, Iowa	1-14
2-15	School, Grand Rapids, Mich.	1-14
2-15*	Quarters, Ft. Dupont, Del	1-21
2-15*	Quarters, Fort Monroe, Va	1-21
2-16*	Coping, Washington, D. C	1-14
2-16	Jail, Youngstown, Ohio	1-28
2-17*	Post-office, Salisbury, N. C	1-14
2-18*	Post-office, Greenville, Miss	1-21
2-18	Court-house, Newton, Iowa	1-28
2-20	Post-office, Bar Harbor, Me	1-21
2-20	Plans, Port Arthur, Ont	1-28
2-2[illegible]	Post-office, Roanoke, Va	1-21
3- 1	Machinery, Maxton, N. C. (Mfg. Pl.)	1-21
3- 3	Post-office, etc., Augusta, Me	1-28

WATER-WORKS.

1-29	Water-works impvt., Carlyle, Ill.	1-21
1-29	Flume, Richmond, Va	1-28
1-30	Pumping plant, Fort Michie, N. Y	1-28
2- 1	Well, Denison, Iowa	12-31
2- 1*	Pumps, etc., Anadarko, Okla.	1-21
2- 2*	Water-works, Hugo, Okla	1-14
2- 2	Pumping engine, Kenosha, Wis	1-14
2- 2	Pump, Richland Center, Wis	1- 7
2- 2	Steel tank, Scranton, Miss	1-28
2- 4	Pumping station, Minot, N. Dak	1-21
2- 5*	Condenser, Key West, Fla	1- 7
2- 6	Pump, Lorain, Ohio	1-28
2- 6*	Water plant, Saltsburg, Pa	1-28
2- 8	Water-works, Edgemont, S. Dak	1-28
2-10	Pumping engine, Phoenix, Ariz	1-28
2-15	Reservoir, New Ulm, Minn.	1-21
2-15	Water-works, Sebree, Ky	1-21
2-20*	W.-Wks., Webster, N. Y	1-28
2-22*	Pump, Winnipeg, Man.	12- 3
3-15	Water-works, Wichita, Kan	1-21

SEWERS.

1-29*	Sewer, Oswego, N. Y	1-21
1-29	Sewer, Toledo, Ohio	1-28
2- 1	Sewer, Lawrence, Kan	1-28
2- 1	Sewers, Moorhead, Minn	1-28
2- 1	Sewer, Vicksburg, Miss	1-28
2- 1	Sewer, Elizabeth, N. J	1-21
2- 1	Vitrified pipe, etc., Leavenworth, Kan	1- 7
2- 2*	Sewer, Toronto, Ont	1-21
2- 2	Sewers, Marion, Kan	1-28
2- 2	Sewer, Ottawa, Ill	1-28
2- 3*	Sewer mains, Birmingham, Ala	1-28
2- 3	Sewer, etc., Long Island City, N. Y	1-28
2- 3	Tanks and tower, Baltimore, Md.	1-28
2- 3	Sewers, Brooklyn, N. Y	1-21
2- 4	Sewer, Wilson, Pa	1-28
2- 5*	Sewers, Louisville, Ky	1-28
2- 5	Sewer pipe, etc., Banff, Alta	1-14
2- 8	Sewers, College Hill, Ohio	1-14
2- 9*	Sewer extension, Niagara Falls, N. Y	1-28
2-10	Sewer system, Detroit, Minn	1-28
2-10	Sewers, Brooklyn, N. Y	1-28
2-11*	Sewer pipe, Brantford, Ont	1-28
2-15	Sewer system, Santa Cruz, Cal	1-28
2-15	Sewer, Great Falls, Mont	1- 7
2-17	Sewers, etc., East St. Louis, Ill	1-21
2-17*	Sewers, Baltimore, Md	1-28
3- 2	Sewer, Newburgh, N. Y	1-28
3- 8	Sewer, Grundy Center, Iowa	1- 7

STREETS AND ROADS.

1-30	Grading, etc., Cleveland, Ohio	1-21
2- 1*	Pavement, Olympia, Wash	1-21
2- 1	Grading, etc., Delphi, Ind	1-21
2- 1	Sidewalk, Elizabeth, N. J	1-21
2- 1	Road, Fowler, Ind	1-14
2- 1	Roads, Greenfield, Ind	1-14
2- 1	Paving, Appleton, Wis.	12-24
2- 1*	Pavement, Olympia, Wash.	12-24
2- 1	Road, Washington, Ind	1-28
2- 1	Pavement, Moorhead, Minn	1-28
2- 1	Paving, Detroit, Mich	1-28
2- 1	Paving, Dorranceton, Pa	1-28
2- 2	Roads, Crawfordsville, Ind	1-14
2- 2	Roads, Vincennes, Ind	1-14
2- 3	Roads, Kokomo, Ind	1-14
2- 3	Regulating, etc., Brooklyn, N. Y.	1-21
2- 3	Grading, etc., Cleveland, Ohio	1- 7
2- 3	Brick, asphalt tile, Baltimore, Md	1-28
2- 3	Regulating, etc., Long Island City, N. Y	1-28
2- 4	Roads, Laporte, Ind	1-28
2- 4	Paving, Wilson, Pa	1-28
2- 4	Macadamizing, Buffalo, N. Y	1-28
2- 4	Roads, Frankfort, Ind	1-21
2- 5	Paving, St. Louis, Mo	1-21
2- 5	Road, Anderson, Ind	1-28
2- 5	Road, Lebanon, Ind	1-28
2- 5	Road impvt., Cincinnati, Ohio	1-28
2- 6	Roads, Terre Haute, Ind	1-28
2- 8	Road, Franklin, Ind	1-28
2- 8	Paving, Indianola, Iowa	1-28
2- 8	Maintaining asphalt, New York.	1-28
2-10	Paving, Fond du Lac, Wis	1-21
2-12	Road, Fowler, Ind	1- 7
2-12	Roads, Lafayette, Ind	1-28
2-15	Street impvt., St. Paul, Minn	1-28
2-15	Pavement, Paris, Ill	1-28
2-15*	Concrete walks, Whipple Barracks, Ariz.	1-21
2-16	Road repair, Milford, Ohio	1-28
2-17	Road impvt., St. Bernard, Ohio	1-28
2-18	Road, Greenfield, Ind	1-28
2-18	Street impvt., Oakwood, Ohio	1-28
2-18*	Paving, etc., Greenwood, S. C	1-28
2-18	Road, Spencer, Ind	1-14
3- 2	Roads, Bloomfield, Ind	1-28

MISCELLANEOUS.

1-29	Cement, Ottawa, Ont.	1- 7
1-30	Drainage, Velasco, Tex	1-21
1-30	Ditch, Hume, Ill	1-28
2- 1	Fire-hose, etc., Homestead, Pa	1-28
2- 1	Supplies, Panama	1-21
2- 1	Borings, Phila., Pa	1-21
2- 1	Culvert, Marshalltown, Iowa	1-21
2- 1	Canals and levees, Fayette, Miss.	1-21
2- 1	Ditch, Sioux City, Iowa	1-14
2- 1	Dredging, Philadelphia, Pa	1-21
2- 2	Tile drain, Jefferson, Iowa	1-28
2- 2	Dredge, Toronto, Ont	1-28
2- 2	Supplies, Wash., D. C	1-28
2- 3	Under-drainage of slopes, Baltimore, Md.	1-28
2- 3	Tile drain, Jefferson, Iowa	1-28
2- 4	Lumber, New York	1-28
2- 5	Tile, etc., Girard, Ill	1-28
2- 6*	Removing wrecks, Boston, Mass	1-14
2- 6*	Ditches, levees, Atkinson, Ill	1-14
2- 8*	Fence, Prescott, Ariz.	1- 7
2- 8	Supplies, Panama	1-21
2- 9	Broken stone, New York	1-21
2- 9	Ponton wagons, Wash., D. C.	1-21
2- 9	Supplies, Wash., D. C	1-28
2-10	Railway, Gilmore & Pittsburg	1-28
2-10	Sale of steamer, Wash., D. C	1-21
2-10	Ditch, Logan, Ia.	1- 7
2-11	Wooden pontoons, Mobile, Ala	1-21
2-12*	Pier, dredging, Milwaukee, Wis.	1-21
2-15	Tile drain, Jefferson, Iowa	1-28
2-13	Drydock, Hawaii	12-17
2-15	Monument, Indianapolis, Ind	1-14
2-16*	Repairing pier, Frankfort, Mich.	1-21
2-16	Tile drain, Jefferson, Iowa	1-28
2-18	Fences, Fort Barrancas, Fla	1-28

FOREIGN.

2-15	Electric railway, Algeria	12-31
3- 1	Floating dock, Egypt	12-31

CIVIL SERVICE.

2- 3	Inspector Hulls, Galveston, Tex	1- 7
2- 3	Civil & Hyd. Engr., Wash., D. C.	1- 7
2- 3	Supt. Construction, Washington, D. C	1-21
2-17	Engr., Fort Berthold, N. D	1-21
2-24	Scientific Asst., Wash., D. C	1-21
2-24	Laboratory aid, Columbia, Mo	1-21
2-24	Topographic aid, Washington, D. C	1-28
2-24	Junior chemist, Washington, D. C	1-28
2-24	Computer, Washington, D. C	1-28
2-24	Asst. bacteriologist, Washington, D. C	1-28

RAILWAYS.

(* *denotes that this work is advertised in Engineering News.*)

ABBEVILLE & NORTHWESTERN.—We are officially advised that this company plans to build a railroad, about 75 miles long, from Abbeville, Ga., via Pineview and Unadilla, to Fort Valley, Ga., 58 miles; and a branch from Emerich to Montezuma, Ga., 17 miles. The authorized capital is $100,000. Headquarters will be at Abbeville, Ga. J. L. Bankston is Pres., Abbeville. Surveys are made and right-of-way secured. Date for letting contracts not fixed upon yet. Company was recently chartered. The incorporators were J. L. Bankston, W. A. Cherry, T. R. Moye, E. M. Carnes, Hal Lawson, W. H. Wilkinson, M. B. Cannon, J. B. Girardeau, C. F. Chapman and W. L. Harrell, all of Abbeville. Previously noted.

ABILENE & SOUTHERN.—Company has filed its charter in Texas. Work is in progress between Abilene and Ballinger, Tex. Grading is about completed from Abilene to Winters, 38 miles, and track-laying is under way. Charter permits a line 200 miles long. Morgan Jones, Abilene, Tex., is Pres.; G. M. Dodge, Council Bluffs, Iowa, Vice-Pres.; D. T. Bomar, Fort Worth, Tex., Counsel; W. E. Kaufman, Abilene, Tex., Secy. and Treas. The officers are also directors, other members of the board being Ed S. Hughes and J. M. Radford, of Abilene, Tex.; J. W. Broad, of Fort Worth, Tex.; C. A. Doose and C. S. Miller, of Ballinger, Tex. Percy Jones, of Abilene, is Engr.-in-Charge. Morgan Jones will supervise construction and equipment. The main line will probably run from Abilene to Sonora, Tex., 160 miles, with a branch from Ballinger, northwest to San Angelo, Tex., 40 miles. Gen. Grenville M. Dodge, chairman of the Colorado & Southern Railway, is one of the incorporators. The two roads will connect at Abilene.

ALBERTA & GREAT WATERWAYS.—Wallace McDonald, Attorney, Edmonton, Alta., is applying for a charter for a company under this title with powers to build a railway from Edmonton to Fort McMurray, with several branch lines, in all about 300 miles of track, according to the route taken.

BEAVER, PENROSE & NORTHERN.—Incorporated in Colorado to build a railway from Beaver, Colo., on the Denver & Rio Grande Ry., northwest to Penrose, 6½ miles long. The incorporators include C. M. MacNeill and Spencer Penrose, of Colorado Springs, and J. Q. McDonald, of Florence. M. J. Burgdorf, of Cripple Creek, Colo., has started survey. The incorporators are identified with the Beaver Land & Irrigation Co., of Pueblo, Colo.

CANADIAN NORTHERN.—The Saskatchewan Government, it is stated, will grant subsidies for branch lines in this province to the extent of $15,000 per mile for 500 miles of branches to be built in the province. These branches include the following lines: From a point near Battleford, westerly for 40 or more miles; from Dalmeny northerly and northwesterly for 45 miles or more; from Maryfield westerly for 135 miles; from Davidson westerly for 120 miles, and from Roche Perche northerly to this branch, 25 miles; from Craven to Bracepeth, 45 miles.

CANADIAN NORTHERN.—The Canadian Northern Railway will be opened between Montreal and Quebec by May 1, according to the Montreal "Gazette," when the new short line from Garneau Junction will become an accomplished fact. This announcement has been made by Guy Tombs, passenger and freight agent of the Canadian Northern: "Mr. Tombs says that in the meantime important improvements will be made both to the Montreal and Quebec terminals. The railway, after leaving the city of Quebec, will pass over the St. Charles River and enter the new suburb of Limoilou, which, in all probability will be annexed to the city and become the headquarters for the machine shops of the C. N. R. in that section of the province. Thence the road will reach Ste. Foye, Cap Rouge, St. Augustin, Point aux Tremles, Les Ecureuils, Cap Sante, Port Neuf, Deschambault, St. Casimir, Lachevrotiere, whence the track of the C. N. R. extends on to St. Prosper, St. Stanislas and to Garneau Junction, where the old line of the Canadian Northern is joined and followed to Joliette and Montreal at Moreau St." It will be 175 miles in length.

CHESAPEAKE & OHIO.—See Virginia Air Line.

COLORADO & SOUTHERN.—Company has made surveys for new lines at several points, we are officially advised, but so far there are no definite plans regarding future construction.

EASTLAND, RISING STAR & TEXAS.—Chartered in Texas to build a railway from Eastland, Tex., to Rising Star, Tex., 27 miles. Capital, $100,000. The incorporators are W. S. Michale, J. L. Alford, James Smith, V. R. Coon, Fred M. Delano, J. L. Carleton, H. S. Warren, G. P. Harris, N. J. Alford and T. A. Williams, of Eastland. Contract for building this line has been given to V. R. COON, of Detroit, Mich.

EL PASO & KANSAS CITY SHORT LINE.—This railway will be built from the southern boundary of New Mexico at the Texas State line east under the Guadalupe Mountains along the Pecos Valley, crossing the Pecos River at Malaga, thence northeast into the Panhandle of Texas. As surveyed the line in Texas will pass through the Counties of Yoakum, Gaines, Terry, Lynn, Lubbock, Crosby, Floyd, Motley, Cottle and Hardeman to Quanah, where connection is to be made with the St. Louis & San Francisco R. R. Bonuses have been granted amounting to $797,000 and right-of-way secured for about 480 miles. Col. J. L. Bell, of El Paso, Tex., and 25 Broad St., New York, is interested. Noted on July 23, 1908.

GILMORE & PITTSBURG.—We are officially advised that contracts will be let on Feb. 10 by the Gilmore & Pittsburg Railroad Co., Ltd., at its general offices, 1208 Machesney Bldg., Pittsburg, Pa., for the construction of seven miles of the proposed 120 miles of standard-gage steam railroad to be built in Montana and Idaho during 1909. Contract will include a 750-ft. tunnel and 300,000 cu. yds. of grading. Specifications for this work can be obtained at the office of the chief engineer, T. H. Bacon, at the above address, after Jan. 22. All bidders must be prepared to install on work before March 1, 1909. Any additional information required can be obtained at the office of the company. W. A. McCutcheon is Pres. Estimated cost of work, $3,000,000.

GULF, TEXAS & WESTERN.—This company has been incorporated under the laws of New Jersey, with a capital of $12,500,000, all common stock. The incorporators are Joseph J. Jermyn, of Scranton, Pa.; George B. Jermyn, Pres. of the Dime Bank, of Scranton, and Samuel S. Moore. The company is a holding concern for the Gulf, Texas & Western Railway Co., of Texas, which was incorporated in November and is constructing a standard-gage road from Burrs Ferry, on the Sabine River, in Eastern Texas, to the town of Benjamin, in the western part of the State, a distance of about 500 miles. Company will soon let contracts. Roy C. Megargel is Pres., 5 Nassau St., New York; John T. Witt is Ch. Engr., Jacksboro, Tex. Capital is partly obtained. Right-of-way is secured and surveys are made. Noted on Nov. 19.

IDAHO & WASHINGTON NORTHERN.—We are officially advised that this company has let contract to GRANT SMITH & CO., of Spokane, Wash., for grading and bridging a 53-mile extension from Newport, Wash., northwesterly along the west bank of the Pend d'Oreille River, to Cement, Wash. Contract calls for grading to be completed Sept. 1, 1909. The railroad company will do the tracklaying and ballasting. R. F. Blackwell is Vice-Pres. and Gen. Mgr., Spirit Lake, Idaho.

KENTUCKY MIDLAND.—We are officially advised that this railroad, now in operation from Central City, Ky., to Cypress Creek, eight miles, will build to Madisonville, an extension of 16 miles. Right-of-way and capital are partly secured. Survey has been made, but no date set for letting contracts. There will be one 750-ft. tunnel; other work will be light. G. B. Hengen is Pres., 655 Monadnock Block, Chicago. M. M. Wheeler is Ch. Engr., Central City.

LOUISIANA.—Surveys are being made by C. C. Genung, the engineer who built the Opelousas, Gulf & Northeastern Railroad between Crowley and Melville, for a route for a proposed railroad line between Crowley and Lake Arthur, La., 20 miles.

MANISTEE & NORTH-EASTERN.—The Michigan Trust Co., as receiver for the Buckley & Douglas Lumber Co., of Manistee, Mich., and Manistee & North-Eastern R. A. Co., has been authorized by the U. S. District Court, Grand Rapids, to mortgage the property of the two companies for $1,500,000. With this money the Court directs the receiver to pay the debts of the lumber company and to construct a 36-mile extension to the railroad. Wm. Douglas is Vice-Pres. and Gen. Mgr., Manistee.

ORANGE & NORTHWESTERN.—An extension from Buna, Tex., via Logansport, La., to Marshall, Tex., 145 miles, is planned. J. E. Kelley is Supt., Orange, Tex.

PARIS & MOUNT PLEASANT.—Organized to build a 50-mile line from Mount Pleasant, Tex. J. V. Moore, Secy. of the Mount Pleasant Commercial Club, is interested. Officers are: Pres., R. F. Scott, of Paris, Tex.; First Vice-Pres., Sam Williams; Second Vice-Pres., H. A. Wilson; Treas., R. J. Murphy. The directors include the officers and J. J. Culberson, H. P. Mayer and A. N. Rogers, of Paris, Tex., and J. V. Moore and C. O. Lide, of Mount Pleasant. Capital stock, $750,000, subscribed.

TEMISKAMING & NORTHERN ONTARIO.—The Ontario Provincial Government has under consideration the question of extending the Temiskaming & Northern Ontario

Railway from Charlton to Elk Lake, a distance of approximately 28 miles. G. A. McCarthy is Ch. Engr., North Bay, Ont.

VIRGINIA AIR LINE RY.—The Chesapeake & Ohio Ry. Co. is reported to have acquired the Virginia Air Line Ry., which runs from Gordonville to Strathmore, Va., 35 miles.

WINNIPEG & NORTHWESTERN.—Application is being made to the Dominion Parliament for an extension of time for this company and also for right to build a number of branch lines. A. T. Drummond, Toronto, Ont., is Attorney for the company.

ELECTRIC RAILWAYS.

LEBANON, CONN.—The Lebanon St. Ry. Co., it is announced, will build a line from Yantic to South Manchester. It will be about 28 miles long. Company is not ready to begin construction. L. E. Livermore is Pres., and L. P. Smith is Secy., Lebanon.

DANBURY, CONN.—D. E. Leowe and others of Danbury have petitioned the State for a charter for an electric line to run from Danbury past Lake Kenosia to the New York State line.

MERIDEN, CONN.—C. J. Danaher, of Meriden, and others have asked for a charter for an electric railway from Meriden to Berlin, with a branch to the Berlin station; also from Meriden through Kenington to a connection with the Berlin-New Britain line at Berlin Junction.

NEW YORK, N. Y.—The Appellate Division of the Supreme Court has granted the application of the Public Service Commission for an extension of time until Oct. 15, 1911, to begin work on the Broadway-Lafayette Ave. subway. Under the previous ruling it would have been necessary to begin work before Jan. 25 to make valid the consent for the construction of the loop.

ONEONTA, N. Y.—The Oneonta, Charlotte Valley & Cobleskill R. R. Co., it is stated, desires to communicate with parties who would be willing to take the project in hand and finance it. The proposed railway will connect Oneonta, South Worcester, Charlotteville, Summit, Richmondville, Cobleskill and other towns. C. G. Payne, Charlotteville, N. Y., is Pres. and Gen. Mgr.; C. G. Mallette, Cobleskill, Vice-Pres.; F. W. Olmstead, South Worcester, Secy.; B. W. Hoye, Oneonta, Treas.

ROCHESTER, N. Y.—The Rochester, Corning & Elmira Traction Co. may begin construction in April on the first section of its proposed railway. As noted on Oct. 8, 1908, the "Public Service Commission has authorized the Rochester, Corning & Elmira Traction Co., Rochester, to issue $1,000,000 of bonds. The company proposes to build and operate an electric railway between Rochester, Corning and Elmira, that will permit the operation of high-speed express trains, besides slower local trains. The road is to be built in sections, beginning at the south line of Rochester. The first section will include the distance between Rochester and Lakeville, on Conesus Lake, and other sections will be begun as soon as the first is under way. L. Feuerstein, 27 Church St., Rochester, is Engr." John Hofman, Rochester, is Pres.; Samuel B. Williams, Rochester, Treas.; Louis H. Whitebeck, Secy.

BEAVERDALE, PA.—We are officially advised that date for letting construction contracts has not been decided by the Mount Carmel & Locust Gap Transit Co. The line will be 2¼ miles long, running from Beaversdale to Locust Gap. Surveys are made and capital secured. Right-of-way has not been obtained yet. E. W. Samuel is Pres., Mt. Carmel, Pa. Charter was recently granted to this company. Capital, $30,000. E. W. Samuel is Pres., Mt. Carmel; F. W. V. Lorenz is Ch. Engr., Shamokin, Pa.

READING, PA.—The Intercity Elec. Ry. Co. has been organized to build a line from Reading to Allentown, via Lyons and Tipton, 35 miles long. Capital, $500,000. Maxwell H. Bochow is Pres.; Josiah Fisher, Secy., and Bateman Saddington, Treas. W. R. Kershner, of Allentown, and Jacob L. Hinterleiter, of Topton, are directors. It is stated that the entire right-of-way has been procured, and that construction will begin as soon as the frost is out of the ground.

GOLDSBORO, N. C.—The Goldsboro Traction Co. has been incorporated in North Carolina to construct and operate an electric street railway in and around Goldsboro to the limit of 50 miles in any direction out of the city. About one mile of the track is ready. Company plans to have about 2½ miles in operation to Revilo Park by June 1. Capital stock authorized, $150,000; issued, $45,000. Company will build the line with its own forces. E. T. Oliver, of Raleigh, N. C., is Pres. and Gen. Mgr.; S. L. Blackburn, of Richmond, Va., Vice-Pres.; J. S. Oliver, of Goldsboro, N. C., Secy. and Treas. The board of directors include the officers and J. H. Trent and W. T. Oliver, of Logan, W. Va. J. R. Edwards, Greensboro, N. C., is Engr.

UHRICHSVILLE, OHIO.—We are officially advised that the Wheeling, Cadiz & Tuscarawas Traction Co., of Cadiz, Ohio, has completed the survey of its electric line from Wheeling, W. Va., to Uhrichsville, a distance of 55 miles. This line connects the following towns: Bridgeport, Martin Ferry, Burlington, Colerain, Pleasant Grove, Harrisville, New Athens, Cadiz, Laceyville, Franklin, Philadelphia Road, Dennison and Uhrichsville. The right-of-way has been secured and the line will be put under contract and constructed early in the spring. A. E. Townsend, Pres. and Gen. Mgr.; J. E. Tiffany, Ch. Engr., Cadiz, Ohio. Noted on Jan. 7.

CINCINNATI, OHIO.—We are officially informed that the Cincinnati, Wilmington & Xenia Traction Co. expects to let construction contracts this spring. No contracts have been awarded yet. The line will be about 170 miles long, connecting Cincinnati and Columbus, Ohio; with branches to Dayton, Xenia and Springfield. Surveys are made and right-of-way is mostly secured. Capital has not been all obtained. H. Rohwer is Ch. Engr., 901 New National Bank of Commerce Bldg., St. Louis, Mo. J. N. Casswell, Gen. Mgr., Wilmington, Ohio. Noted on Jan. 7.

TOLEDO, OHIO.—The Ohio Northern & Michigan Ry. Co., it is announced, proposes to build lines as follows: Toledo and Ann Arbor branch, to run north connecting Lambertville, Mich., Petersburg, Dundee, Milan and Ann Arbor; extension from Petersburg northwest to Jackson via Britton, Ridgeway, Tecumseh, Brooklyn and the chain of lakes south of Jackson. The company has working connections with the electric lines at Jackson, Ann Arbor and Toledo. Track has been laid from Toledo, Ohio, north to Petersburg, and trains are now in operation on this part of the line, and grading has been finished from Petersburg to Ann Arbor. The company expects to build the section from Petersburg to Jackson as soon as the weather permits. A number of bridges are yet to be put in place, including one 125-ft. bridge, one of 100 ft., one of 80 ft. and three of 54 ft. The company is only capitalized for $1,000,000, and not for $17,000,000, as noted on Jan. 7, and is not offering stock for sale. W. E. Niles is Secy., 122 Monroe St., Chicago, Ill.

ZANESVILLE, OHIO.—The Zanesville & Meigs Creek Valley Traction Co. expects to commence construction work on its line by March 1. The line will connect with the line of the Parkersburg, Marietta & Interurban Railway at Beverly. H. Blodgett is Mgr.

BLUFFTON, IND.—The Bluffton, Berne & Celina Traction Co. is securing right-of-way for its proposed railway. Surveys are completed. Elections will be held in Wells and Adams Counties on Feb. 8 to vote upon granting this company subsidies. Noted on Jan. 7.

FREEPORT, ILL.—Owen T. Smith, Pres. of the Freeport Interurban Ry. Co., advises us that company is not yet ready to award contracts for constructing this line. As noted on Jan. 7, the Freeport Interurban Ry. will be 36 miles long, connecting Freeport, Polo and Dixon.

ROCK ISLAND, ILL.—The Galesburg & Rock Island Traction Co., of Rock Island, Ill., has been incorporated by Frank H. Clark, of Springfield, Ohio; A. C. McWhinney and R. P. McGeehan, of Kansas City; E. H. Field, of Monmouth, Ill., and E. Woodward, Warren Everett and J. Elliott, of Chicago. The company proposes to build from Galesburg to Rock Island.

GALESBURG, ILL.—The People's Traction Co. proposes to extend its railway to Galva, 24 miles. H. Alton is Gen. Supt.

WAUKEGAN, ILL.—The Waukegan, Rockford & Elgin Traction Co. has been incorporated in Illinois. The principal office is Waukegan and the capital stock is $1,500,000. It is proposed to construct an electric line from Waukegan to Woodstock, Marengo, Rockford, Belvidere, Elgin, Antioch and Milburn. The incorporators and directors are: Robert D. Wynn, Claire C. Edwards, John D. Pope, Fred Bairstow and Dr. John C. Foley, all of Waukegan.

DUBUQUE, IOWA.—The Dubuque, Illinois & Wisconsin Interurban Ry. Co. has been chartered. Authorized capital stock, $1,500,000. Company plans to begin construction this summer on its line, which will connect Dubuque, East Dubuque, Ill.; Fairplay, Cuba City and Platteville, Wis., 30 miles. Victor H. Stevens is Pres.; J. R. Guthrie, Vice-Pres. and S. M. Langstaff, Secy., all at Dubuque.

IOLA, KAN.—The Kansas City, Olathe, Ottawa & Iola Ry. Co. has been incorporated with a capital stock of $5,000,000. The company proposes to build an electric line from Kansas City south to Iola. The incorporators are: J. D. Bowersock, Lawrence; Robert A. Barr, Kansas City, Mo.; Hugh A. Holmes, Kansas City, Kan.; W. S. Fallis, Garnett; C. H. Estabrook, Ottawa; J. P. Harris, Ottawa; Frank Hodges, Olathe; Jas. O. Rodgers, Iola; J. I. Wolfe, Burlington; W. M. Riger, Burlington. The line will be about 150 miles in length.

KANSAS CITY, MO.—The Kansas City & Kansas Southwestern Ry. Co. has given the Carnegie Trust Co., of New York, a mortgage for $12,000,000 to secure funds for building trolley lines between Kansas City and Topeka, by way of Tonganoxie and Lawrence, and a line from Lawrence to Independence, Kan. Surveys between Kansas City and Topeka and between Ottawa and Independence are finished. Surveying parties are now at work between Ottawa and Lawrence. Construction probably will begin between Kansas City and Topeka on the Iola-Ottawa division March 1.

CLAYTON, MO.—The St. Louis, Creve Coeur & Western Ry. Co. has been incorporated for the purpose of building an electric railway from the city limits of St. Louis to Creve Coeur Lake, 14 miles. Construction may be started by March 1. Three years ago a franchise was granted to a company known as the St. Louis, Fern Ridge & Western Ry. to use the same route. Several of the stockholders in the old company are stockholders in the new one, which is practically a reorganization of the old company. The old franchise will be transferred to the new company. The company will have 14 miles of double track. Capital stock, $140,000. The Board of Directors, who are the principal stockholders, are: Fred. Essen, Hugo Essen, William F. Pfister, Dr. John Pfister, Jacob Studt, Jr., Dr. Carl Feld, A. H. Werremeyer, Peter Wetzel, at Clayton; B. C. Stevens and Richard Stevens.

HELENA, ARK.—The Helena Street & Interurban R. R. Co. has been incorporated with a capital stock of $25,000, to build an electric railway in Helena. The incorporators are J. W. Burks, Jr., Pres.; Charles S. Hernly, Vice-Pres.; J. W. Vineyard, Secy. and Treas. Noted on Jan. 14.

BENTONVILLE, ARK.—City has awarded contract to the WESTERN SURETY & INVESTMENT CO., Minneapolis, Minn., to build an electric railway from Joplin, Mo., to Bentonville, then to Gentry, Tarrytown, Springdale and back to Bentonville. The work upon the new railway is to begin immediately after the contract is signed, and the Western Surety & Investment Co. is guaranteed an appropriation of $55,000 by citizens here as soon as the line is completed. A. W. Morris is Mayor.

WICHITA FALLS, TEX.—A 25-year franchise for an electric street railway has been granted to Frank Kelly and J. A. Kemp. The line will extend to Lake Wichita, where a pleasure resort will be built.

SALT LAKE CITY, UTAH.—The Salt Lake & Ogden Ry. Co. is planning to electrify its line between Salt Lake City and Ogden, 50 miles. S. Bamberger is Pres. and E. A. Vail is Ch. Engr., Salt Lake City. Cost is estimated at $600,000.

LIGHT AND POWER PLANTS.

(* *denotes that this work is advertised in Engineering News.*)

PROVIDENCE, R. I.—Plans have been completed for a power-house for the Atlantic Mills. Its capacity will be 8,000 HP. and a steam turbine of 1,500 KW. has been contracted for. The steam engines, now scattered over various sections of the plant, will be removed when the new power plant is ready. All of the exhaust steam will be utilized in the various manufacturing processes in which live steam is employed, being principally in the dye-house.

NORWICH, CONN.—Plans are being considered by the Board of Gas and Electric Commissioners for changes in the municipal electric light plant, which include discontinuing the use of the rotary converter and changing all 500-volt, direct-current motors for alternating-current motors. William F. Bogue is Mgr.

NEW YORK, N. Y.—Bids are asked by John W. Brannan, Pres. Bd. Trustees, Bellevue & Allied Hospitals, until 3 p. m., Feb. 1, for furnishing and setting lighting fixtures in Training School for Women Nurses of Bellevue and Allied Hospitals, situated on 25th and 26th Sts. and East River, Boro of Manhattan, the City of New York.

Bids are asked until 2 p. m., Feb. 3, by John F. Ahearn, Pres. Boro. of Manhattan, for the completion of the electric lighting and power wiring system at the City Hall building, City Hall Park, New York.

NEW YORK, N. Y.—Bids are asked until 11 a. m., Feb. 10, by Bird S. Coler, Pres. Boro. of Brooklyn, for furnishing all the labor and material required for repairs and alterations to lighting and power equipment of Disciplinary Training School, Boro. of Brooklyn.

BUFFALO, N. Y.—Bids are asked until Feb. 3 by the State Commission in Lunacy, Albany, N. Y., for furnishing engine, dynamo, switchboard and feed-water heater and making changes to exhaust mains at the Buffalo State Hospital, Buffalo, N. Y. Franklin B. Ware is State Arch., Albany, N. Y.; T. E. McGarr is Secy. of Comn.

ELLWOOD CITY, PA.—The Councils have awarded the PENNSYLVANIA POWER CO. the contract for furnishing electric light for street lamps and for the public buildings for a period of five years at 2 1/5 cts. per KW. The only other bid submitted was that of the Pittsburg, Harmony, Butler & New Castle Ry. Co., which was 2¼ cts. per KW.

PITTSBURG, PA.—The City of Pittsburg has awarded a contract to the WESTINGHOUSE ELECTRIC & MFG. CO., of this city, calling for 1,200 metal flame arc lamps, at a total of $60,000, which also includes the new equipment to be installed in the municipal power station on the north Side. The lamps will all be placed on the North Side and will replace the old lamps that are now in use there.

CAMBRIDGE, MD.—The Cambridge Light & Power Co., in which R. B. Fentress, Seaboard Bank Bldg., Norfolk, Va.; Phillips L. Goldsborough, Custom House, Baltimore, Md., and others are interested, has awarded contract to WEHR, WALDEN & DUKEHART, Baltimore, for installation of plant of approximately 200-KW. capacity. W. H. Medford, Cambridge, also is interested.

BALTIMORE, MD.—See item under Miscellaneous Contracts. — Under-drainage of slopes.

BARBOURSVILLE, W. VA.—We are officially advised that the United Utilities Co. is planning to construct and operate a combined electric, water and steam-heating plant, and will require the following equipment: One 25 KW. 225-volt, direct-current generating unit; one 50-gal.-per-minute turbine pump (vertical preferred) direct connected to vertical motor; two 150-HP. boilers (vertical preferred) to operate at 125 lbs.; a 3-panel switchboard for 220-volt generators to operate in parallel on six 50-amp light and power circuits. Pipe fittings, valves, heaters, etc., will be required. L. L. Dowthat, Mgr., informs us that the company intends to combine electric, telephone and water-works plants, now in operation separately, and extend and improve the service in general. The company is considering steam and gas engines, pumps, etc.

THOMASTON, GA.—Plans are being considered for improvements and additions to the municipal electric light plant, including the installation of a 140-HP. boiler, one 140-HP. engine, one 100-KW. and one 175-KW. alternating-current generator. H. H. Wheless is Supt.

MULBERRY, FLA.—We are officially advised that the Holmboe Co., Lincoln Savings Bank Bldg., Louisville, Ky., has been retained as Consulting Engineer and Superintendent for power-house and boiler-house for the Prairie Pebble Phosphate Co., at Mulberry, the power-house to be about 50 × 200 ft. Work on these buildings will consist of fireproof buildings to take place of old buildings, and there will be no machinery required. The company has been retained to prepare plans and estimate of cost for raising roof on main power-house of the Prairie Pebble Phosphate Co.; building is 60 × 300 ft. Work will co f additional steel trusses and fireproof onstruction with system of ventilators.

THIBODEAUX, LA.—Geo. Porde, Hibernia Bldg., New Orlea Consult. Engr., has been engaged Board of Aldermen to prepare plans ecifications for the construction of a tric light plant and water-works sy

MOUNT OLIVE, MISS.—I n & Cunningham, 703 Maison Blan Bldg., New Orleans, La., have been eng to prepare plans for the construction n electric light plant at Mount Olive, ost $7,000. Bids for construction of th t will be called for in about 60 days.

BELLEVUE, KY.—The Cit establish electric light plant, it is d. George Hornung & Son, Johnson Bl incinnati, Ohio, Engrs.-in-Charge, have ared estimates. Cost, $33,000. J. A. idy, 22 Fulton Ave., is Mayor.

RICHMOND, KY.—Bids are d by the Board of Regents of the East tate Normal School, Richmond, Ky., at office of Anderson & Frankel, Lexingto Archs., until Feb. 17, for constructi heating and lighting plant and ma training building and distributing syst nd heating appliances for University at Richmond, Ky.

NEWTON FALLS, OHIO Home Lighting Co., of this town, has granted a 20-year franchise to furnish ic light, heat and power to Newton Fa and will have the town wired within a k, when Councils will award the compa the contract for furnishing electric l for the streets and public buildings. Th ompany's plant is in operation.

ELKHART, IND.—It is stated that the Indiana & Michigan Electric Co. is contemplating improvements on the St. Joseph River at the dam during the spring. It is the intention of the company to build a dam two feet higher. F. A. Bryan, South Bend, Ind., is Gen. Mgr.

GREENCASTLE, IND.—The Board of Trustees of the De Pauw University has decided to construct a new electric light plant this year, to cost between $4,000 and $5,000. It has not been decided whether to erect a new building or build an addition to the present heating plant. R. L. O'Hara is Pres. of the Board of Trustees.

MEDARYVILLE, IND.—The Town Board will ask for bids soon for construction and equipment of an electric light and power-house plant.

CHELSEA, MICH.—The Michigan Central R. R. Co. has decided to equip its terminals in Detroit and the main line as far west as Ypsilanti, Mich., a distance of 30 miles, with electricity. It is proposed to abolish local trains and use electric cars for local business, having the steam trains stop only at large cities. Electricity for operating the system will be furnished by a hydro-electric plant to be constructed on the Huron River at Chelsea, Mich. G. H. Webb, Detroit, is Ch. Engr.

CARROLLTON, ILL.—The Carrollton Heat, Light & Power Co. intends to change its system to 60 cycles and install a 150-KW. 3-phase, revolving field generator if the change is made. F. M. Sinsabaugh is Secy. and Treas.

LOCKPORT, ILL.—Contracts have been let by the Drainage Board of the Sanitary District of Chicago for machinery and apparatus to increase the output of the water power plant at Lockport as follows: To the WESTERN ELECTRIC CO., 259 South Clinton St., Chicago, Ill., for generator, at $25,748; for furnishing transformers, to J. JACKSON, at $18,500.

CHIPPEWA FALLS, WIS.—The Dells Paper & Pulp Co. is considering plans to construct a dam at Jim Falls, near Chippewa Falls. The company proposes to utilize the power to operate a large paper and pulp mill. It has not yet been decided whether the mill will be located in this town or at Eau Claire. In case the plant is located in Eau Claire the power will be transmitted by wire.

*MILWAUKEE, WIS.—Bids are asked until 10.30 p. m., Feb. 17, by the Commissioners of Public Works for furnishing and erecting complete in running order ready for use, in buildings and on foundations to be furnished by the City of Milwaukee, all the machinery and appurtenances thereto, necessary to make a complete installation of a gas producer and a gas engine electric lighting plant, said plant to be located on Blocks 70 and 95, on the corner of Walker and Davidson Sts., in the Fifth Ward of the City of Milwaukee. August M. Gawin is Comptroller. Charles J. Poetsch is City Engr.

ALBERT LEA, MINN.—The Albert Lea Light & Power Co. has decided to make extensions and improvements to its plant, for which plans and specifications have been prepared. The work will include the installation of a 200 or 300-KW. unit, a 200-HP. boiler, 100-KW. motor generator, transformers, three miles of pole line and five miles of gas mains. Ludwig Kemper is Mgr. and Treas.

REDWOOD FALLS, MINN.—We are officially advised that plans are being considered by A. C. Burmeister, of Redwood Falls, Minn., for constructing a hydro-electric plant, the equipment of which will include two 100-KW. generators and water wheels, also arc and incandescent lamps. The cost of the plant, including the distributing system is estimated at between $20,000 and $30,000.

PINE CITY, MINN.—Plans are being considered by the Snake River Power Co., it is stated, to develop water power of Snake River. It is proposed to dam the river about seven miles east of Pine City and erect transmission lines to Hinckley and Rush City. J. M. Allen is interested in the enterprise.

WICHITA, KAN.—The management of the Wichita Natural Gas Co. has completed plans for constructing a relay compressing station, to cost 00,000. The station will be erected at a nt on the 12-in. trunk line, a few miles t of Wichita.

FORT RO ON, NEB.—The contract for constructing electric light system at Fort Robinson h en awarded to **SAMUEL A. OLIVER**, rawford, Neb., at $32,000. Capt. F. T nold is Q. M.

MEETEE WYO.—It is stated that Fred. C. b, of Cody, Wyo., is planning to ere n electric light plant in Meeteetse, Wy nd has a contract to pump the water he water system of the town. The plant be operated by water power from Grey River.

ARKANS CITY, ARK.—The Land & Power Co. his city has awarded the following co ts for constructing a power plant to c $40,000: For construction of power-hou to the FREEBORN ENGINEERING CONSTRUCTION CO., Scarritt Bldg., ansas City, Mo., and the ALLIS-CHAL RS CO., of Milwaukee, Wis., for furnis the machinery. It is to be a hydro-elect plant with steam auxiliary plant.

HOUSTO TEX.—The Brunner Water & Light Co., Brunner, a suburb of Houston, will comm work at once constructing an electric lig plant and water-works system to supply services in Brunner and Chaneyville. cost of work is estimated at $25,000. L. Yarborough, J. W. Pruett and others are interested.

TERREL TEX.—Bids will be received by the city out Feb. 10 for erection of an electric-lig plant. Frame buildings, or ordinary construction, 48 × 92 ft., will be erected at a cost of $2,000. Steam and electric machinery to cost $15,000 to be installed. W. C. Drake is Engr.-in-Charge. E. R. Miller is City Clerk.

TACOMA, WASH.—At a recent election the city of Tacoma authorized the Council to construct a 20,000-HP. hydro-electric power plant on the upper Nisqually River at a cost not to exceed $2,000,000. F. L. Davis is City Engr.; H. J. McGregor is Comr. Pub. Wks.

EUGENE, ORE.—City Council has let the contract for the electrical apparatus for the proposed municipal power plant to the PORTLAND MACHINERY CO., 62 First St., Portland, Ore., at $11,512. The terms of the contract call for machinery capable of generating 1,200 HP. The contract for the turbine water wheels was awarded to the PELTON WATER WHEEL CO., at $19,800.

YREKA, CAL.—The Siskiyou Electric Light & Power Co. has decided to extend its line at once from Montague to Dunsmuir. A 1,500-HP. generator will be put in at Fall Creek. The poles, wires and transformers have been ordered for the entire installation. The company expects to furnish light and power to Dunsmuir from its main line by June 1, and in the meantime will continue the present service from the local plant. Seven miles of the new power line is being run down the Klamath River for the mines of that section. This company was reincorporated recently for $1,000,000, and is now lighting Ashland, Ore., and the following towns in Northern California: Yreka, Montague, Aetna, Fort Jones, Klamathon, Lairds, Greenview and Dunsmuir. The new extension will serve Gazelle, Edgewood, Weed, Sisson, and Shasta Springs. Alex J. Rosborough, of Oakland, Cal., is Secy. of this company. A. C. Sprout, San Francisco, Cal., is Ch. Engr. and Gen. Supt.

MONTREAL, QUE.—The Saraguay Electric & Water Co. contemplates the erection of about 20 miles of transmission lines during this year. E. Champagne is Mgr.

GLENCOE, ONT.—The Municipal Council has awarded to the COLONIAL ENGINEERING CO., of Montreal, Que., the contract for the erection of a gas producer plant of 96 HP.

*WINNIPEG, MAN.—Smith, Kerry & Chace, Consult Engrs., Confederation Life Bldg., Toronto, Ont., inform us that the City Council of Winnipeg on Jan. 7 awarded the following contracts: The general works, at Point du Bois to JOHN GUNN & SONS, of Winnipeg, being construction required (except machinery equipment) for a 60,000-HP. generating station with power-house building for 30,000 HP., at approximate contract price of $779,000, to be completed in 20 months. Construction of steel towers for two 3-phase circuit, 75½ miles of transmission at 3.90 cts. per lb., partly riveted and delivered f. o. b. cars at various railway stations adjacent to transmission line. The amount involved is approximately 1,100 tons, MANITOBA IRON WORKS, at $87,550. Aluminum transmission cable, 278,000 c. m., about 315 tons, at 23½ cts. per lb., delivered, NORTHERN ALUMINUM CO., at $148,050. For general works, there were six bidders, for steel towers, ten bidders, and for transmission cable, three bidders. Bids were received for galvanized and for painted towers and it has been decided that the construction shall be of solid rivetted towers on concrete footings with three coats of graphite paint. Further contracts for the erection of transmission system insulators, telephone line, machinery equipment for 25,000-HP. generating step-up and step-down transformers and terminal station in the city of Winnipeg will be called for soon. Noted on Jan. 14.

CALGARY, ALTA.—Bids are asked by H. E. Gillis, City Clerk, until noon, Feb. 18, for three water tube boilers of 1,000 HP., with piping and induced draft system of 2,500 HP.; one 500-KW. generator connected to a 750-HP. high-speed engine for railway system with condenser, switchboard, etc. Hill is City Engr.

BRIDGES.

MINEOLA (L. I.), N. Y.—A double-track railroad bridge, 50 ft. long, will be constructed over the Long Island R. R. tracks here. Estimate cost, $100,000. Bids will be asked as soon as the Public Service Commission approves plans which will be completed about March 1. W. E. Sexton is Engr., 46 North Twelfth St., Philadelphia.

ATLANTIC CITY, N. J.—The Atlantic City & Suburban Traction Co., H. S. Miller, Gen. Mgr., Pleasantville, will construct a new bridge over Great Egg Harbor Bay, extending from Somers Point to Ocean City and making it possible to carry passengers from Florida Ave. and the Boardwalk or Absecon to Ocean City. The contract will be awarded, it is reported as soon as plans and specifications can be prepared and accepted by the Cape May authorities. Estimated cost, $250,000.

YORK, PA.—The College Ave. bridge will probably be rebuilt by the city at a cost of about $75,000.

McKEESPORT, PA.—Bids are asked by C. E. Soles, City Controller, until 4 p. m., Feb. 2, for repairs to the bridge at Hartman St., Eighth Ward.

CAPE CHARLES, VA.—The New York, Philadelphia & Norfolk R. R. Co., J. R. Rodgers, Supt., Cape Charles, contemplates the construction of bridges.

NORFOLK, VA.—The McLEAN CONTRACTING CO., Maryland Trust Bldg., Baltimore, Md., has been awarded the contract by the receivers of the Norfolk & Southern Ry. Co. for piling work for the completion of the bridge across Albemarle Sound, North Carolina, at about $475,000. The contract for the bridge steel work has not yet been let. The receivers are now engaged in securing estimates for this and the contract will be awarded shortly. It will require between $550,000 and $600,000 to complete the bridge.

LYNCHBURG, VA.—The Municipal Engineering Department is completing plans and specifications for viaduct to span new route of Southern Ry. and Durham branch of the Norfolk & Western Ry. in Fifth St. The structure will be of reinforced concrete, girder pattern. Estimated cost, about $50,000, exclusive of approaches. H. L. Shaner is City Engr.

CULPEPER, VA.—The citizens of Orange and Culpeper Counties are considering the construction of a bridge over the Rapidan River at Mitchell's Ford. Estimated cost, $5,000.

MONTGOMERY, W. VA.—The Montgomery & Cannelton Bridge Co. has been incorporated with a capital stock of $50,000 by O. J. Henderson and M. J. Simms, Montgomery; W. E. Beardslee, Clarksburg, W. Va.;; W. N. Conger, Owego, N. Y., and Walter C. Hardy, Charleston, W. Va.

*AUGUSTA, GA.—The city on Jan. 15 awarded the contract to the ROANOKE BRIDGE CO., Roanoke, Va., at $27,596 for the construction complete, except piers, of the steel bridge with draw span over the Savannah River at Center St. The bridge will have eight spans, with a total length of 928 ft., 20 ft. wide in clear roadway, 16 ft. high, sidewalks each 5-ft. wide. Nisbet Wingfield is Comr. Pub. Wks.

GREENVILLE, MISS.—Bids are asked until Feb. 1, by W. W. Miller, Clk. County Supervisors, for constructing a pile bridge over Black Bayou.

MERIDIAN, MISS.—The contract will be let on Feb. 1 by the city for the construction of a wooden bridge across Okitobeha Creek. W. R. Pistole is Clk.

HARRISONBURG, LA.—The Police Jury has authorized N. R. Cotton, Pres., to ask for bids for the construction of the Bayou Bushley bridge and the repair of the Jonesville bridge.

HIGH BRIDGE, KY.—The "high bridge" used by the Cincinnati Southern Ry. in crossing the Kentucky River is to be replaced by a modern steel structure, capable of being double-tracked and costing about $100,000. The new bridge will consist of three spans, each 300 ft. long.

TOLEDO, OHIO.—Bids will be received until Feb. 3 by the Board of Public Service, Reynold Voit, Secy., for furnishing material and making repairs to the Cherry St. bridge over the Maumee River. The work consists of additional floor beams in two Water St. spans and placing additional floor beam hangers for six spans.

CINCINNATI, OHIO.—The Board of Public Service will erect a bridge over the canal at Mohawk St. Estimated cost, $25,000. J. Sundmaker is City Engr.

CLEVELAND, OHIO.—Bids are asked until 11 a. m., Feb. 20, by the Board of County Commissioners for bridge work per report No. 2189 and 2194. A. B. Lea is County Surv.

COLUMBUS, OHIO.—Because of irregularities in the bid of the Champion Iron Co., of Kenton, Ohio, which was $645 lower, the Board of Public Service on Jan. 20 awarded the contract for the construction of the superstructure of the Mound St. viaduct to the McCLINTIC-MARSHALL CONSTRUCTION CO., Park Bldg., Pittsburg, at $18,576. The resolution rejecting the bid of the Champion Iron Co. declared its bid had been pronounced invalid by George S. Marshall, City Solicitor.

MICHIGAN CITY, IND.—Plans are being prepared for reinforced-concrete abutments with pile foundation for the Sixth St. drawbridge. H. M. Miles is City Engr.

MISHAWAKA, IND.—The County Commissioners contemplate constructing a modern concrete and stone bridge across the river at Logan St.

MARTINSVILLE, IND.—The Commissioners of Morgan County are asking for bids for constructing approaches to a number of bridges.

RICHMOND, IND.—Bids are asked until 2 p. m., Feb. 6, by the Board of County Commissioners for repairing the Commons Bridge in Center Township. Demes S. Coe is County Audr.

GARY, IND.—Plans and specifications are on file at the office of Engineering News, New York, for the construction of a bridge over the Calumet River at Broadway, to consist of three 66-ft. arches with retaining walls, etc., and to be 80 ft. wide. Estimated cost, $37,500. Bids are asked until Feb. 1. W. F. Bridge is Engr., Hammond, Ind.

*CHICAGO, ILL.—We are officially advised that bids were received as follows on Jan. 20 by the Sanitary District of Chicago for the superstructures of the Chicago & Northwestern Ry. Co.: (a) a railroad bridge for the Mayfair cut-off of the railway in Niles Township, (b) a railroad bridge for the Milwaukee division at Grant St., Evanston, Ill.: GEORGE W. JACKSON, INC., Borland Bldg., Chicago, (a) $21,851, (b) $10,464; the Toledo-Massillon Bridge Co., Toledo, Ohio, (a) $22,100, (b) $11,730;; Fort Pitt Bridge Co., House Bldg., Pittsburg, Pa., (a) $23,309, (b) $12,511; Milwaukee Bridge Co., Milwaukee, Wis., (a) $24,110, (b) $11,850; Modern Steel Structural Co., Waukesha, Wis., (a) $25,207, (b) $11,587; Wisconsin Bridge & Iron Co., Monadnock Bldg., Chicago, (a) $24,900, (b) $12,500; Charles Volkmann & Co., 184 Dearborn St., Chicago, (a) $24,725, (b) $13,300; Penn Bridge Co., Beaver Falls, Pa., (a) $24,800, (b) $13,430; Worden-Allen Co., 184 La Salle St., Chicago, (a) $25,442, (b) $13,525; Stroebel Steel Construction Co., Monadnock Bldg., Chicago, (a) $26,684, (b) $13,494; King Bridge Co., Cleveland, Ohio, (a) $27,100, (b) $13,300; National Construction Co., Tacoma Bldg., Chicago, (a) $26,228, (b) $14,592. I. J. Bryan is Clk. Itemized bids are given under Contract Prices.

FORT DES MOINES, IOWA.—Bids will be received by the Constructing Q. M., U. S. A., until 3 p. m., Feb. 10, for constructing a steel highway bridge at Fort Des Moines.

DES MOINES, IOWA.—Plans and specifications are being prepared by C. H. Cartlidge, Bridge Engr., 209 Adams St., Chicago, Ill., for the Seventh St. viaduct, length, 2,000 ft. Estimated cost, $210,000.

ST. PAUL, MINN.—L. W. Rundlett, City Engr., is preparing an estimate for the Council for the construction of a steel bridge extension to the present Third St. bridge. It is planned to build the bridge from Maria Ave. to the terminus of the Third St. bridge. Estimated cost, $75,000.

KINGMAN, KAN.—Bids are asked until 2 p. m., Feb. 2, by Bert Walker, County Clk., for constructing a 280-ft. bridge over Chicaskia River, 1½ miles west of Spiveye, and for constructing a 160-ft. bridge over creek in Rochester Township. The county will furnish all materials and pile driver for use of contractor.

SYRACUSE, KAN.—The contract for constructing a 720-ft. steel bridge of eight spans over the Arkansas River has been awarded to the WICHITA CONSTRUCTION CO., of Wichita, Kan., at $21,990.

JOPLIN, MO.—The Council on Jan. 19 awarded the contract for the construction of the Third St. viaduct to HENRY L. DOHERTY & CO., at about $40,000.

MENA, ARK.—Bids are asked until Feb. 6 by Wright Prickett, County Judge, for constructing three bridges for the county, one over the Owachita River south of Cherry Hill, one over the Rolling Fork, west of Grannis, and one over the Cossatot River, east of Janssen. An appropriation of $9,000 has been made for the bridges.

TEMPLE, TEX.—The Gulf, Colorado & Santa Fe Ry. Co., C. F. W. Felt, Ch. Engr., Galveston, Tex., will construct a viaduct over Adams St., 40 ft. wide. Estimated cost, $25,000.

SPOKANE, WASH.—J. C. Ralston, City Engr., has estimated the cost of constructing a steel viaduct at Washington St. at about $350,000.

SAN BERNARDINO, CAL.—Contracts were awarded by the city on Jan. 19 as follows: Bridge over Warm Creek to McINTYRE CEMENT CO., of Riverside, Cal., at $4,847; five concrete culverts over Town Creek to same company at $6,225; crosswalks to E. R. WERDIN & CO., of Los Angeles, Cal., at $8,065.

LAPRAIRIE, QUE.—Bids are asked until 6 p. m., Jan. 29, by the Municipal Council of Laprairie County for constructing an iron bridge and accessories in the St. Jacques River in the St. Lambert road at Laprairie. F. C. Larose is Secy.-Treas. Council.

BUILDINGS.

(* *denotes that this work is advertised in Engineering News.*)

AUGUSTA, ME.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., March 3, for the construction complete (except elevator) of an extension to the U. S. post-office, court-house, etc., at Augusta.

BOSTON, MASS.—The Court House Commission has awarded contract to the GEORGE A. FULLER CO., Board of Trade Bldg., at $679,000. Bids were received on Jan. 8. The award must be approved by the Governor, Chief Justice and the Mayor before it becomes legal.

SPRINGFIELD, MASS.—Bids were received as follows on Jan. 20 at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Springfield, Mass: Horton & Hemenway, 683 Atlantic Ave., Boston, $89,366; J. E. & A. L. Pennock, Philadelphia, $98,200; Watertown Construction Co., Watertown, N. Y., $104,645; William R. Compton Realty & Bldg. Co., Elmira, N. Y., $86,060; William H. Fissell, New York, $95,596; Charles B. McGuire Co., Providence, R. I., $93,830; M. P. Wells, Philadelphia, $90,385; Norcross Bros. Co., Worcester, Mass., $99,576; George Sykes, New York, $94,750; Ambrose B. Stannard, St. James Bldg., New York, $95,000; Woodbury & Leighton, 166 Devonshire St., Boston, $104,974; Bliss Griffiths Construction Co., New York, $103,771; L. H. Scott & Co., Springfield, Mass., $106,620.

SPRINGFIELD, MASS.—We are advised by Boring & Tilton, Archs., 32 Broadway, New York, that the general contract for constructing a 2-story and basement library to be built for the City Library, has been let to J. E. & A. L. PENNOCK, 1133 Broadway, New York. The building will be 220 × 86 ft., of fireproof reinforced-concrete construction, with marble exterior. H. C. Hallman is Librarian. Cost, $300,000.

NEW HAVEN, CONN.—The carpenter contract for the proposed Ives Memorial Library has been let to GEORGE W. SMITH CO., INC., 3907 Powelton Ave., Philadelphia. The building will have two stories and will cost $400,000. Cass Gilbert, 11 East 24th St., New York, is Arch.

PLAINVILLE, CONN.—M. O. Ryder and B. O. Lewis, Bldg. Com., have presented plans for a school building, three stories high, 30 × 39 ft., and have been authorized to secure estimates of cost.

NEW YORK, N. Y.—Thain & Thain, Archs., 4 East 42d St., advise us that they have prepared plans for a 6-story elevator apartment house to be built on 136th St., 100 ft. west of Broadway, for the Belgrade Realty Co., Adolph Hirschfeldt, Pres., 605 West 141st St. It is to have a frontage of 70 ft. and a depth of 86.11 ft. and will contain 25 suites of apartments. It is to cost $85,000. Estimates are being taken by the owners.

Plans have been filed for a 7-story department store building, to be built for Adolph Finkenberg, 95 West 119th St., as owner, at the corner of Third Ave. and 124th St. It is to be of ornamental brick, 41.5 ft. front and 100 ft. deep, and will cost $55,000. Buchman & Fox, 11 East 59th St., are Archs.

We are advised by Neville & Bagge, Archs., 217 West 125th St., that they have prepared plans for a 6-story apartment house to be built for Emanuel M. Krulewitch, 695 St Nicholas Ave., at the corner of Broadway and 177th St. It will have a Broadway frontage of 89.10 ft. and a depth of 102 ft., and will contain 42 suites of apartments. The building will cost $200,000. Estimates are being received by the owner.

George F. Pelham, Arch., 505 Fifth Ave., is preparing plans for two 6-story elevator apartment houses, to be built for the Bendheim Construction Co. and to occupy the entire block bounded by 181st, 182d Sts., Broadway and Wadsworth Ave. Each house will accommodate 60 families. They are to be ready for occupancy Sept. 1.

NEW YORK, N. Y.—We are officially advised that plans have been filed for a 5-story dwelling house to be built for Hiram C. Bloomingdale, 21 East 63d St., at 11 East 80th St. It is to be of brick, finished with limestone and terra cotta, of Colonial design, with a mansard and a central entrance with staircase. It will have a frontage of 20 ft. and a depth of 95½ ft. Schwartz & Gross, 347 Fifth Ave., is Arch., with B. N. Marcus as associate. Cost, $50,000. Contracts will be let later.

A 6-story loft building, with ground floor stores, to be erected for William Waldorf Astor, at 11 to 13 East 35th St., will be constructed of brick and cement stone, finished with mullion bays and having a frontage of 50 ft. and a depth of 95 ft. It is to cost $60,000. Clarence L. S fert, 410 West 34th St., is Arch.

We are advised by Neville & Bagge, Archs., 217 West 125th St., that they will take estimates for constructing a 6-story brick apartment house, 75×71.10 ft., to be built for Thomas P. Neville, 502 West 179th St., at Jumel Terrace and 160th St. Estimated cost, $130,000.

Francis H. Kimball, Arch., 71 Broadway, advises us that the GEORGE A. FULLER CO., Fuller Bldg., has the general contract to construct a 9-story and basement garage, 66×92 and 116 ft., at Broadway and 57th St., for the Island Realty Co., 111 Broadway. Cost, $150,000.

NEW YORK, N. Y.—A block of land, running 400 ft. on the waterfront of the Wallabout Basin, in Brooklyn, has been leased by George Dressler, Pres. of the Wallabout Market Merchants' Association, and upon it will be erected a row of buildings especially adapted for wholesale meat and fish markets. The strip of land is bounded by Wallabout Basin, Clinton, Flushing and Fleeman Aves. The new buildings will have a frontage of 39 ft. on Fleeman Ave. and will be 100 ft. deep. Cold air storage pipes were laid in the market recently, and it is proposed to make connection with these.

Neville & Bagge, Archs., 217 West 125th St., advise us that they will receive bids for a 6-story brick apartment, 99.11×90 ft., to be built by Gross & Herbener, Inc., 45 West 95th St. The building will cost $1[illegible],000.

The same architects inform us that C. M. Silverman, Inc., 3492 Broadway, owner, will receive estimates for a 6-story brick apartment, 99.11×140 ft., to be erected at Broadway and 140th St. at a cost of $150,000.

The Elks' clubhouse, to be erected on the south side of 43d St., west of Sixth Ave., will be built from plans by James Riely Gordon, Arch., 244 Fifth Ave. The building will be a 12-story steel frame, fireproof structure, and will have two basements. The façade will be of granite, marble and limestone. The building will be equipped with four passenger elevators, one monumental stairway, two subsidiary stairways and two service stairways. The entire structure is expected to cost about $1,000,000. The lodgeroom will be 72 ft. in the clear in each direction between the colonnades, 87×93 ft. between the walls, and rising to a height of 32 ft. above the parquetry floor. Above the lodge chamber will be 216 outside rooms, with outside baths, including 24 suites for the accommodation of members. The entire roof will be occupied by a solarium and roof garden, with pergolas, fountain, etc.

BUFFALO, N. Y.—The Common Council of the City of Buffalo intends to order the erection of an 8-room brick addition to Public School No. 59, upon land recently acquired by the city, and the Commissioner of

Public Works has been directed to prepare plans and specifications and advertise for proposals for doing said work. Francis G. Ward is Comr.

William Morris and Frank A. Dudley, 45 Falls St., Niagara Falls, N. Y., are to erect a theater with store and offices at Pearl and West Genesee Sts., to cost $150,000. Final plans have not been completed. Esenmein & Johnson, Ellicott Bldg., Buffalo, are Archs.

Plans proposed by Robert A. Greenfield, Arch., 8 Bridge St., New York, have been accepted by the First Church of Christ (Scientist) for a church building of stone and marble to be erected at Chapin Parkway and Potomac Ave. Cost, $300,000.

Green & Wicks, Archs., 110 Franklin St., have completed plans for a hall and lodge building, 48 × 150 ft., two stories and basement, of brick, stone trimmed, to be erected at Jefferson and Best Sts. by the Fraternity Hall Association of Buffalo. Frank W. Standart is Secy., 706 Mutual Life Bldg.

BUFFALO, N. Y.—Lansing & Beirl, Archs., 371 Pearl St., have begun work on plans for a residence to cost $50,000 for Jacob G. Lang, to be built at the corner of Delaware Ave. and Auburn Ave.

INDUSTRY, N. Y.—Bids are asked by Miss Laura E. Aldridge, Pres. Bd. of Mgrs. of the New York State Agricultural and Industrial School, until 7 p. m., Feb. 1 (readvertisement), for constructing complete, including heating, plumbing and electric wiring, for addition to industrial building, hospital for contagious diseases, four cottages for boys and five cottages for employees. Franklin B. Ware, Albany, N. Y., is State Arch.

JOHNSTOWN, N. Y.—The Board of Education has accepted the plans of Fuller & Pitcher, Archs., 91 State St., Albany, N. Y., for the proposed school building. Cost, $60,000. Plans will be ready about Feb. 10. J. E. Hagadorn is Clerk.

WATERTOWN, N. Y.—The National Bank & Loan Co., Watertown, has retained Clinton & Russell, Archs., 32 Nassau St., New York to prepare plans for a 7-story bank and office building to cost $150,000. George C. Sherman, Watertown, is Pres.

ERIE, PA.—Charles W. Duncombe, owner of the summer resort at Lake Pleasant, 16 miles from Erie, will build a cement block hotel and pavilion there to replace the one destroyed by fire several weeks ago. It will cost about $100,000, and work will be started as soon as possible in the spring, so that it can be completed and opened by June 1. It will be fireproof.

CLAIRTON, PA.—WILLIAM MILLER & SONS CO., 29 Federal St., Pittsburg, Pa., have been awarded the contract for the erection of a public school building here at $44,000. The price does not include the foundations, plumbing, heating or lighting, or furnishings. C. J. Rieger, 307 Fourth Ave., Pittsburg, is Arch.

JOHNSTOWN, PA.—W. R. Myton, Arch., will receive bids about Feb. 15 for constructing a 3-story bank building, 30 × 84 ft., to be built on Main St., at a cost of $75,000, for the First National Bank.

LATROBE, PA.—The Y. M. C. A., T. B. Dietz, Secy., is contemplating construction of a building to cost from $50,000 to $75,000. No architect has been selected.

PHILADELPHIA, PA.—George McCurdy, Pres. of Common Council, has introduced a bill providing for a permanent loan of $4,000,000 for the purchase of sites and the erection of public schoolhouses and authorizing submission of the loan to the vote of the people next November. The measure has been referred to the Finance Committee. Henry R. Edmunds is Pres. Bd. of Education.

A $40,000 church is to be built in Frankford Ave., above Harrison St., by the North Baptist congregation, of Frankford. The plans are being prepared by J. Howard Murphy.

John Stafford, 1112 Chestnut St., will erect a group of apartment houses on 33d St., overlooking Fairmount Park. The plans, which have been completed by Sauer & Hahn, 1112 Chestnut St., provide for four separate buildings, two of which will be located at the corner of Clifford St., one on Clifford St. and the other on the south side of Columbia Ave., east of 32d St. Each of the four buildings will be four stories in height, and measuring 45 × 110 ft. There will be 32 flats in all. Each flat will contain eight rooms and two baths, with a separate room and bath for servants. The interior decorations will all be of hard woods, and each building will contain a heating plant. The basements will be provided with trunk and storage rooms. The work of construction will be started in the spring, and the buildings will be made ready for occupancy by September.

Estimates will be invited soon on the plans for the new building for the Curtis Publishing Co. at the corner of Sixth and Walnut Sts. The Curtis Building will consist of three sections: The editorial and business on Sixth St., between Walnut and Sansom Sts., the mechanical on Walnut St., west of Sixth, and the boiler-house on Sansom St., west of Sixth. The cost will exceed $3,000,000, it is stated. Edgar W. Seeler, Real Estate Trust Bldg., is Arch., and Frank C. Roberts & Co., same address, are Engrs. Noted on Nov. 26.

PITTSBURG, PA.—O. M. Topp, Arch., Westinghouse Bldg., has awarded the contract for the construction of the proposed business block at Fifth St. and Penn Ave., for the Thomas C. Jenkins Estate, to the THOMPSON-STARRETT Co., 49 Wall St., New York. The building will be of structural steel, brick and stone, and will be six stories in height, with the frame-work of such construction that six additional stories can be added later. It will cover a ground area 90 × 112 ft., and will cost about $200. Work will be started about April 15, and the building is to be completed about Oct. 1. It will have two elevators for passengers and one for freight, steam heating system, private electric light plant and sanitary plumbing.

SOMERSET, PA.—J. C. Fulton, Uniontown, Pa., has been commissioned to prepare the plans and specifications for the proposed hospital for the insane that will be built here by Somerset County. The plans will be prepared at once, and a contract awarded in about three months. The building, exclusive of furnishings, will cost about $130,000. It will be of brick and stone construction, will have plumbing and steam or hot water heating system, marble or tile floor and elevators.

WAYNE, PA.—David Knickerbocker Boyd, Arch., Harrison Bldg., is preparing plans for a school to be built in Wayne which will be known as the Radnor High School. It will have two stories and a basement, with an exterior of stone. In addition to containing many class and lecture rooms the building will contain a large gymnasium.

WASHINGTON, D. C.—Bids were received as follows on Jan. 25 at the office of the Commissioners of the District of Columbia for construction of the Business High School, R St., between Seventh and Eighth Sts., N. W.: W. E. Mooney, Lenman Bldg., $87,637; Pavarini & Wyne, Munsey Bldg., $69,300; Robert T. Humphrey, Fourth and M Sts., S. E., $72,800; Burgess & Parsons, $74,220; Thompson-Starrett Co., Commercial Bank Bldg., $71,895. All of Washington, D. C.

ANDERSON, S. C.—Bids were received as follows on Jan. 23 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Anderson, S. C.: King Lumber Co., Charlottesville, Va., $52,800; William R. Compton Realty & Building Co., Elmira, N. Y., $55,138; C. M. Guest, Anderson, S. C., $62,885; George A. Clayton, Atlanta, Ga., $57,000; W. M. Malkey, Anderson, S. C., $58,980; S. J. Warner, 40½ North Forsythe St., Atlanta, Ga., $61,700; Algernon Blair, Montgomery, Ala., $54,632; Robt. E. Pharrow, Atlanta, Ga., $54,689; Gude & Co., Prudential Bldg., Atlanta, Ga., $52,500; Miles & Bradt, Austell Bldg., Atlanta, Ga., $55,959; Norman Underwood, Durham, S. C., $66,935; George W. Waring, Columbus, S. C., $63,800; Fred Minshaw, Abbeyville, S. C., $69,100; Johnson & Matthews, Florence, S. C., $65,308; Cecil L. Saunders, Cleveland, Ohio, $64,370. Feb. 1, 1910.

FORT BARRANCAS, FLA.—Bids are asked until 11 a. m., Feb. 5, by A. L. Rhoades, Q. M., for constructing, plumbing, heating and electric wiring one artillery barrack, one lavatory, one mess hall, one double set firemen's quarters at Fort Barrancas, Fla., and one double set fireman's quarters at Fort Pickens, Fla.

KEY WEST, FLA.—The Bureau of Yards and Docks, Navy Dept., Washington, D. C., has awarded to the PENN BRIDGE CO., Bond Bldg., Washington, D. C., contract for the construction of a steel and concrete storehouse building at Key West, Fla., at $54,791.

MURFREESBORO, TENN.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of the post-office building at Murfreesboro, Tenn., to WILLIAM F. HENSY, Murfreesboro, Tenn., at $38,760. A complete list of bids was given on Jan. 14.

CINCINNATI, OHIO.—We are officially advised that Tietig & Lee, Archs., Commercial Tribune Bldg., have been retained by the Board of Education, C. W. Handman, Secy., to prepare plans for the 3-story 14th District School building. Garber & Woodward, Archs., Neave Bldg., have been retained to prepare plans for the 3-story Douglass School building and Samuel Hannaford & Sons, Archs., Hulbert Block, have been retained to prepare plans for the 2-story Winton Place School building. The schools will cost $200,000, $150,000 and $100,000 respectively.

YOUNGSTOWN, OHIO.—Bids are asked until 11 a. m., Feb. 16, at the office of the County Auditor, Youngstown, for constructing the proposed Mahoning County jail at Youngstown. Owsley, Boucherle & Co., Maloney Block, Youngstown, are Archs. W. H. Ruhlman is Chn. Mahoning County Bldg. Comn.

TOLEDO, OHIO.—D. C. Stine, Arch., the Valentine, has completed plans for two manual training schools. In addition to 24 standard class rooms, 20 × 24 ft., an auditorium with 1,000 seats, library and gymnasium for general use, the boys' department will contain machine, forge and foundry shops, wood turning, pattern and joining shops and mechanical drawing supply and mill rooms. The appropriation for the schools is $500,000, to be raised on improvement bonds, and the equipment will cost from $50,000 to $75,000. The West Toledo School will be located at Collingwood Ave. and Islington St. No East Toledo site has been selected.

CLEVELAND, OHIO.—Bids are asked until noon, Feb. 12, by Carl Lerouz, Secy. Public Library Board, for construction of a library building at the corner of Clark Ave. and Scranton Road, S. W., in accordance with plans and specifications prepared by Whitfield & King, Archs., 160 Fifth Ave., New York, N. Y.

FORT WAYNE, IND.—We are officially advised that the Trustees of the English Lutheran Church will receive bids as soon as plans are completed for the erection of a $40,000 brick or stone church, 112 × 70 ft. Five architects are making competitive plans. Rev. T. F. Hahn is pastor.

C. Johnson, East 30th St., Chn. Bd. of Trustees of the Arlington Ave. M. E. Church, will receive bids for the erection of a church. Work to begin in the spring.

The Indiana Legislature will appropriate $150,000, it is stated, for the construction of an executive mansion in this city. Work to commence this year. Thomas R. Marshall is Governor, Indianapolis.

INDIANAPOLIS, IND.—We are officially advised that the Board of Public Works has rejected the bids received for the construction of the contagious disease hopsital. Modified plans have been ordered on which bids will be asked at once. The lowest bid received was that of Henry Dollman, at $76,897. Noted on Jan. 14. Brubacker & Stern, Indianapolis, are Archs.

NILES, MICH.—The address of MAX W. STOCK, successful bidder on the post-office for Niles, Mich., was wrongly given by the Treasury Department as St. Joseph, Mo., instead of St. Joseph, Mich. Noted last week.

CHICAGO, ILL.—An apartment building which will cost $100,000 is to be erected at the corner of Calumet Ave. and 53d St. by James C. Cockburn, a builder. The building is to be three stories, 104 × 180 ft., and will contain 24 apartments. Two other buildings are to be erected at the corner of 61st St. Pl. and Madison Ave. and the corner of Madison Ave. and 62d St. Each of these buildings will be 125 × 125 ft. They are to be put up by Mathias Walker, builder, at a total cost of $150,000. L. M. Mitchell, 145 La Salle St., is Arch. for all of the buildings.

A site for an administration building and two dormitories to be added to the Moody Bible Institute, 80 Institute Pl., has just been purchased. The new buildings are to cost about $300,000.

Collins & Morris, Commercial Bldg., are preparing to erect two apartment structures on the South Side. One will be at the corner of South Park Ave. and 43d St., on a lot 104 × 180 ft. that has been bought from the McCormick estate. This will contain 24 flats and will cost $75,000. The other building will be at the corner of 53d St. and Hibbard Ave., where a lot 71 × 160 ft. has been purchased. This building will contain 18 flats and is to cost $80,000.

Bids for the construction of the Vendome, the 20-story structure which the estate of Leander J. McCormick will build on the site of the Victoria Hotel, at the corner of Michigan Ave. and Van Buren St., are being received by Holabird & Roche, Archs., Monadnock Bldg.

PARIS, ILL.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded to GIACOMO MAFFIOLI, of Rockford, Ill., contract for the construction of a post-office building at Paris, Ill., at $58,825. Time, Jan. 1, 1910. A complete list of bids was published on Jan. 14.

GREEN BAY, WIS.—We are officially advised that the Board of Education will erect a 2-story school, to be known as the West Side High School, and to cost $125,000. J. C. Llewellyn, First National Bank Bldg., Chicago, Ill., is Arch. and will take estimates for the construction until about March 3.

NEWTON, IOWA.—Bids are asked by the Board of Supervisors of Jasper County until 2 p. m., Feb. 18, for the erection and completion of a 3-story court-house. Proudfoot & Bird, Flynn Bldg., Des Moines, Iowa, are Archs.; Frank Sellman is County Audr.

ST. LOUIS, MO.—Clay Arthur Pierce, Pres. of the Waters Pierce Oil Co., National Bank of Commerce Bldg., has purchased a lot at the corner of Westmoreland Pl. and Lake Ave., on which he will put up a residence which will cost approximately $100,000. Plans for the dwelling are being prepared and construction will begin in spring.

DENVER, COLO.—Thomas Harrison, Ferguson Bldg., and associates, representing the Broadway Improvement Association, will begin the erection of 3-story hotel on Feb. 1, to contain 120 rooms and to cost $80,000. It will be erected on the corner of Broadway and Welton Sts. and 20th Ave., on the site formerly occupied by the St. John's Cathedral. It is expected that the building will be completed in six months from the time of beginning the excavation. It will be fireproof, and will be built of silicated brick. Architects are at work on plans.

COLORADO SPRINGS, COLO.—The Pikes Peak Club has decided to erect a 4-story and basement business building, 50 × 190 ft., to cost from $75,000 to $100,000. Dr. A. C. H. Friedman is Pres.

WEATHERFORD, OKLA.—Plans and specifications will be received by John L. Mitch, Secy. Bd. of Regents for the State Normal Schools, Guthrie, Okla., at office of E. D. Cameron, State Supt., until 2 p. m., Feb. 9, for a school building, at Weatherford, the cost not to exceed $100,000.

SPOKANE, WASH.—It is stated that the directors of the Old National Bank and the Union Trust Co. will erect a 12-story building on property at Riverside Ave. and Stevens St. soon.

SAN FRANCISCO, CAL.—We are officially advised that Rivers Bros., 461 Montgomery St., are excavating their lot at the corner of Taylor and Turk Sts., to prepare the lot for building. The building will be five stories high, with a basement the full size of the lot. The lot has a frontage of 77.6 ft. on Taylor St. and 40 ft. on Turk St. It was bought recently by the Rivers Bros. as an investment. The basement will be designed for a cafe and finished handsomely to make it attractive. The ground floor will be divided into stores and a restaurant, and the upper floors arranged for either a family hotel or rooming house. The construction will be of brick, tile and iron. The building will cost $65,000. C. Meussdorffer, Humbodlt Bank Bldg., is Arch. Bids for construction will be received about Feb. 15.

The contract for erecting the South End Primary School building has been awarded by the Board of Public Works to McSHEEHY BROS., 47 Langton St., their bid being $73,442, the lowest of eight received.

The plans for the Argonaut Club building to be erected at the corner of Post and Powell Sts., fronting on Union Sq., have been completed by Sylvian Schnaittacher, Arch., 787 Market St., and construction will begin immediately the preliminaries are arranged. The building will have a frontage of 136.6 ft. on Post St. and 91 ft. on Powell St. It will have a basement and three stories, with an ornamental [illegible] erior topped with a classic cornice. I[illegible] rts will be in light gray pressed bric[illegible] ve the first story, with belt courses a[illegible] immings in Utah white stone, and the [illegible] ll St. side will be Utah stone to the [illegible] ory. There will be five stories on Po[illegible] finished in plate glass and ornamental [illegible] work. A marble vestibule entrance w[illegible] on Powell St. for the club and the [illegible] entrance will be on Post St. The c[illegible] the building will be about $90,000. [illegible] V. Hopkins owns the property. Alfred [illegible] g is Pres. of the club and Sylvan D. [illegible] Secy.

LOS ANGELES, CAL.—E. [illegible] cher, proprietor of Fischer's Theate[illegible] First St., between Spring and Main [illegible] has completed negotiations with R[illegible] Marsh & Co. for construction of a p[illegible] se at the corner of Winston and Mai[illegible] the site of the old post-office. The c[illegible] ter of the structure has not been de[illegible] y decided upon as yet. A 5 and 6-stor[illegible] being considered.

SAN JOSE, CAL.—We are [illegible] cially advised that Dr. G. D. Marvin a[illegible] S. Montgomery will erect a 3-story r[illegible] orced-concrete hotel, 69 × 130 ft., on S[illegible] First St., between San Antonio and Sa[illegible] arlos Sts. There will be 72 rooms, wit[illegible] basement under the whole building. T[illegible] hotel has been leased for ten years t[illegible] Kayser Bros., who are conducting the [illegible] s House. Cost, $50,000. Bids will be r[illegible] ved about Feb. 10. William Binder, Au[illegible] ais Bldg., San Jose, is Arch.

LOGAN, UTAH.—James Knox [illegible] ylor, Superv. Arch., Treasury Dept., [illegible] ashington, D. C., received bids as follows [illegible] Jan. 26, for the construction of a post-off[illegible] e building at Logan, Utah: Campbell Buil[illegible] g Co. of Utah, Salt Lake City, Utah, $63,[illegible]; Dieter & Wenzel, Wichita, Kan., $64,2[illegible]; Gindele Bros. & Co., Chicago, $69,471; George Hinchcliff Co., Chicago, $57,500; Northwestern Construction Co., Reno, Nev., $60,000. Time, March 1, 1910.

DULCE, N. MEX.—Bids are asked by R. G. Valention, Acting Comr. of Indian Affairs, Dept. of the Interior, Washington, D. C., until 2 p. m., Feb. 11, to construct and complete at the Jicarilla School N. Mex., one schoolhouse. George L. Williams, Dulce, is Supt.

MONTREAL, QUE.—Bids will be received by Alphonse Gagnon, Secy. of Public Works, until Feb. 5 for the erection of a provincial jail for the Province of Quebec. Plans and specifications may be seen at the Department and also at the offices of Marchand & Brassard, 164 James St., Montreal.

PORT ARTHUR, ONT.—Competitive plans will be received by J. W. Morgan, Secy.-Treas., until Feb. 20, for a collegiate institute to cost not more than $60,000. The building to contain seven class rooms and a number of special departments.

WINNIPEG, MAN.—The Great West Life Assurance Co. has acquired a site at the corner of Lombard and Rorie Sts., upon which it intends to erect a building to cost $150,000.

COQUITLAM, B. C.—Bids for the construction of the central building of the Provincial Asylum the Provincial Government proposes locating on the 1,000-acre tract at the confluence of the Coquitlam River with the Fraser River, five miles from New Westminister, will be called for soon. The structure will cost between $260,000 and $270,000.

VANCOUVER, B. C.—It is stated that the Great Northern Ry. Co. will submit plans to the City Council soon for its proposed terminals in this city, to cost $3,000,000. J. M. Gruber, St. Paul, Minn., is Gen. Mgr.; A. H. Hogeland, St. Paul, is Ch. Engr.

WATER SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

FORT McKINLEY (Portland post-office), ME.—The contract for drilling tubular wells at Fort McKinley has been awarded to the ARTESIAN WELL & SUPPLY CO., of Providence, R. I., at $7,000.

LYNN, MASS.—James Rich, Mayor, has recommended that a new high pressure main be laid and the construction of a fire water tower and reservoir.

PROVIDENCE, R. I.—Walter F. Slade, Comr. Pub. Wks., has awarded the contract for 222 water gates to ALLEN & REED, INC., of Providence, at $4,000, and for 33 hydrants with boxes to the COFFIN VALVE CO., of Boston, at $3,701.

WATERBURY, CONN.—Bonds for $100,000 were sold on Jan. 11 for the preliminary work of increasing the water supply. Estimated cost of entire work, $1,000,000. Robert A. Cairns is City Engr.

HARTFORD, CONN.—Plans for improving the water system during the season of 1909 have been prepared by E. M. Peck, Engr. of Water Comrs. The cost of the whole work proposed will be approximately $200,000. About $50,000 will be required to complete the "East Side" system. The new mains proposed are as follows: 30-in., Main St., from Park to Arch Sts.; 20-in., Main St., from Arch to Morgan Sts.; Windsor Ave., from Main to Canton Sts.; 24-in., Main St., from Morgan to Windsor Sts.; High St., from Main to Asylum Sts.; Ford, Jewell, Trumbull Sts., from Jewell to Wells Sts., and Wells Sts.; also Front St., from Arch to Potter Sts.; Potter St., from Front to Commerce St.; Commerce St., north to State St.; Morgan St., from Market St. to the Boulevard; 16-in., Ann St.; Grove St., from Front to Commerce Sts.; Market St., from Morgan to Pleasant Sts., and Prospect St.; 12-in., Mulberry, Gold, Lewis, South Ann, Haynes, Pratt, Allyn Sts., Union Pl., Spruce St., Hoadley Pl., Foot Guard Pl., Chapel St.; Pleasant St., from Winthrop to Village; Ely, Winthrop, Avon, Kennedy St., from Windsor Ave. to Donald St.; Russell St., from Windsor Ave. to Donald St.; Mechanic St., Kilbourn St., Ferry, Talcott, Temple, Kinsley, Charles Sts.; 10-in., Atlantic St.;

Pleasant [illegible]., from Main to Winthrop Sts.; Union a[illegible] Woodbridge Sts.; 8-in., Orchard, Goodwin[illegible] Village Sts. Henry Roberts is Pres. B[illegible].

ALBION, N. Y.—We are officially advised that the village has decided to construct a water plant consisting of about 22 miles of from 1[illegible] to 16-in. c.-i. pipe, two 125-HP. triplex pumps of 2,000,000 gallons capacity, operated probably by gas engines. The source will be wells. Estimated cost, $225,000. Edward Eaton is Village Clk. W. E. Sexton, [illegible] North Twelfth St., Philadelphia, is Engr.

BROOKLYN, N. Y.—The new high pressure water system is to be extended throughout the manufacturing sections of the Eastern District and South Brooklyn. William C. Cozier, Deputy Comr. of Water Supply, Gas and Electricity, has asked for an appropriation of $1,200,000 for extending the protected district from the Navy Yard to Newtown Creek, the boundary line between Brooklyn and Queens, and from Erie Basin on the South Brooklyn water front to 65th St., Bay Ridge.

•NEW YORK, N. Y.—We are officially advised that bids were received as follows on Jan. 7 by the Board of Water Supply for contract 36 for the construction of the north half of the Wallkill pressure tunnel, a tunnel in rock crossing under the valley of the Wallkill River, and for contract 37, for the construction of the south half of the Wallkill pressure tunnel. The work is located in the towns of New Paltz and Gardiner, Ulster County. Bids were asked for each contract separately and for both contracts combined. Bids were rejected. (Noted on Jan. 14.) (A) Contract 36, (B) Contract 37, (C) total of No. 36 and No. 37: Separate bids: The American Pipe Mfg. Co., (A) $1,889,855, (B) $1,803,120, (C) $3,692,975; Rinehart & Dennis Co., (A) $1,906,290; Arthur McMullen, (B) $1,881,622; Gore-Meenan Co., (B) $1,852,425. Combined bids: The American Pipe Mfg. Co., (A) $1,837,505, (B) $1,803,120, (C) $3,640,625; Booth & Flinn, Ltd., (A) $1,864,813, (B) $1,795,354, (C) $3,660,167; John C. Rodgers & Co., (A) $1,861,855, (B) $1,838,456, (C) $3,700,312; the Degnon Contracting Co., (A) $1,890,540, (B) $1,832,285, (C) $3,722,825; MacArthur Bros. Co. and Mason & Hanger Co., (A) $1,901,005, (B) $1,823,674, (C) $3,724,679; S. Pearson & Son, Inc., (A) $1,906,312, (B) $1,835,466, (C) $3,741,778; Bradley Contracting Co., (A) $1,957,080, (B) $1,874,960, (C) $3,832,040; the Croton Falls Construction Co., (A) $2,173,975, (B) $2,095,512, (C) $4,269,487. The above bids have been rejected. Itemized bids are given in this issue under Contract Prices.

FORT MICHIE (New London, Conn., post-office), N. Y.—Bids are asked until 10 a. m., Jan. 30, by Major R. M. Schofield, Constructing Q. M., U. S. A., New London, Conn., for constructing an addition to the pumping plant at Fort Michie and installing condensing machinery in same.

BUFFALO, N. Y.—JOHN W. DANFORTH & CO. have secured the contract, it is stated, for constructing the steam main connecting the new north boiler house to the pumping station, at $8,295. F. G. Ward is Comr. Pub. Wks.

•WEBSTER, N. Y.—Bids are asked by the Board of Trustees until noon, Feb. 20, for the construction of a system of water-works, consisting of about six miles of c.-i. pipe, pumping station, a small reservoir, stand pipe, power pumps and other appurtenances. Bids will be received for the whole work, including or excluding the stand pipe and pumping equipment and separately for these. Plans and specifications may be seen at the office of the Board or at the office of Knight & Hopkins, Engrs., Rome, N. Y. Specifications may be obtained at the office of the Board.

SEA ISLE CITY, N. J.—Plans have been prepared for the construction of a water and gas plant. Estimated cost, $40,000.

NORTH ARLINGTON (Arlington post-office), N. J.—Wise & Watson, Consult. Engrs., of Rutherford, are preparing plans for the proposed water-works here.

BRANCHVILLE, N. J.—Bids will be asked about the last of February for the construction of water-works here. Estimated cost, $40,000. W. E. Sexton, 46 North Twelfth St., Philadelphia, Pa., is Engr.

•SALTSBURG, PA.—We are officially advised that the time for receiving bids for constructing a water plant for the borough of Avonmore has been extended from Feb. 1 to Feb. 6. Robert H. Wilson is Consult. Engr., Saltsburg.

ELLWOOD CITY, PA.—Official announcement has been made that the Ellwood City Water Co. will start construction of its proposed filtration plant here in the early spring. The company had plans for the new plant prepared last summer, and had expected to start construction last fall, but held the project over on account of the adverse financial conditions. The water supply is secured from the Connoquenessing River. The new plant will be constructed of concrete.

PHILADELPHIA, PA.—Bids were opened as follows on Jan. 25 by the city for the construction and equipment of a high-pressure fire pumping station at Sixth St. and Lehigh Ave. and for furnishing and laying mains in the northeast section of the city for such service: For the pump building, engines and pumps: Millard Construction Co., Pennsylvania Bldg., various styles of engines and pumps, $360,000, $367,000, $373,000, $380,000 and $389,000. Time, 400 days; John R. Wiggins & Co., Heed Bldg., $370,000, $385,000 and $425,000. Time, 250 days; J. G. Doak & Co., 1420 Chestnut St., $370,980, $397,980 and $426,812. Time, 320 days; Edward F. Fonder Co., Land Title Bldg., $385,000. Time, 300 days; Michael O'Rourke, $467,000. Time, 300 days; for excavating trenches, laying connecting mains and repairs to the Fairhill reservoir: Millard Construction Co., $9,800; Michael O'Rourke, $12,500; M. & J. B. McHugh, Witherspoon Bldg., $15,000. The engines and pumps are to be of the gas-driven type, with an aggregate capacity of 12,350 gallons of water per minute, against a pressure of 300 lbs. per sq. in. at the pumps. Against the like pressure at least one unit of engine and pump must have a capacity of 350 gallons per min. The sum of $500,000 is available for this work. George P. Stearns is Dir. Pub. Wks.

RICHMOND, VA.—Bids will be received by E. E. Davis, Supt, W.-Wks., until 5 p. m., Jan. 29, for the construction of a flume or conduit about 5,000 ft. in length from settling basin to new pump house, to be constructed on foundation of present flume as a base. Bids will be received for a 48, 54 and 60-in. wood, steel, iron, reinforced concrete or any other character of construction. Estimated cost, $75,000.

BARBOURSVILLE, W. VA.—See item under Light and Power Plants.

FAIRMONT, W. VA.—The Hampshire Orchard Co., William B. Cornwell, Pres., will install a complete system of water-works. Construction has begun.

GAINESVILLE, GA.—The city is considering arrangements for increasing the water supply system. A committee recommends that the dam and lake reservoir be built below the present station, and pump with a capacity of 60,000 gallons per hr. be installed.

CLEARWATER, FLA.—We are officially advised that the Holmboe Co., Consult. Engr., Lincoln Savings Bank Bldg., Louisville, Ky., have been retained as consulting engineers and superintendents for water-works and sewers to be built here, for which $40,000 in bonds have been voted. Plans will be ready about the middle of February and contract will probably be let about the middle of March. Surveys will be begun at once.

AUBURN, ALA.—The city has voted $12,000 of bonds for the extension of the water-works.

ENSLEY, ALA.—The U. S. Steel Corporation is considering plans for the construction of a water-works system here.

SAMSON, ALA.—We are officially advised that Howard Butt, 121 Sayre St., Montgomery, Ala., has been chosen as Engineer to construct the water and light system at Samson. Mr. Butt and W. J. Gresham, Mayor of Samson, would like to correspond with bonding companies in regard to selling $25,000 water and light bonds, and with manufacturers of water and light supplies.

SCRANTON, MISS.—Bids are asked until Feb. 2 by M. M. Watkins, City Clk., for erecting a 75,000-gallon steel tank with spherical bottom on a steel tower 100 ft. high to balcony. Walter G. Kirkpatrick is Engr., Jackson, Miss.

UNIONTOWN, KY.—E. B. Shifley, City Engr., Uniontown, and Asa Williams, of Owensboro, have been selected to prepare plans and estimates for water-works here. The capacity of the plant will be about 500,000 gallons per day and will pump from river to standpipe. The engineers wish to receive catalogues of motor-driven centrifugal pumps, fire-hydrants and water-gates.

YOUNGSTOWN, OHIO.—The NEPTUNE METER CO., of New York, has secured the contract for furnishing meters for the Water Works Department for the year 1909.

CLEVELAND, OHIO.—The Water-Works Department, E. W. Bemis, 413 Superior Ave. N. E., will construct a new water-works tunnel on the West Side. Estimated cost, $750,000. Plans are being prepared.

LORAIN, OHIO.—Bids are asked by the Board of Public Service, until noon, Feb. 6, for furnishing and delivering one deep-well pump of about 10,000 gallons per hr.

DETROIT, MICH.—Plans have been prepared for the new pumping station to be erected on Park View Ave. Estimated cost, including machinery, $500,000. J. J. Haarer is Comr. Pub. Wks.

ANAMOSA, IOWA.—Bids will be received about March 1 by the city for water-works improvement, including storage reservoir, meters, mains and appliances. George C. Morgan, 169 Jackson Boulevard, Chicago, Ill., is Engr.

PARK RAPIDS, MINN.—The city has voted bonds for extending the water-works system involving about 10,000 ft.

ELLIS, KAN.—HENRY BOWMAN, of Belleville, Kan., has been awarded the contract for constructing the proposed water-works and electric light plant from the plans of the W. K. Palmer Co., Dwight Bldg., Kansas City, Mo. Estimated cost, about $40,000.

GARDEN CITY, KAN.—Plans have been prepared by the Freeborn Engineering Co., Scarritt Bldg., Kansas City, Mo., for constructing 14 electric-driven pump stations for the United States Sugar & Land Co., Garden City. Estimated cost, $100,000.

•WELLINGTON, KAN.—The contract for the erection of a water tank, 140 ft. high and a capacity of 150,000 gallons, has been awarded by the city to the DES MOINES BRIDGE & IRON WORKS, Des Moines, at $6,474.

PLANKINTON, S. DAK.—The City Council has decided to construct an elevated tank, to be used in connection with the water-works system. Bids will be received on two tanks, one to have a capacity of 60,000 gallons, erected on a tower 65 ft. high; the other, 45,000 gallons, on a tower 80 ft. high.

EDGEMONT, S. DAK.—Bids are asked by the city until 8 p. m., Feb. 8, for the furnishing of all materials, labor and tools required in the construction of a system of water-works. C. A. Hardy is Audr.

STEVENSVILLE, MONT.—The citizens have voted $25,000 of bonds for the construction of a water-works system. George T. Boggs is City Clk.

HOUSTON, TEX.—See item under Light and Power Plants.

HOBART, OKLA.—FRED M. PRESCOTT CO., of Milwaukee, Wis., has secured the contract for furnishing and erecting a pumping engine of 2,000,000 gallons capacity, at $6,800. Bids were opened on Jan. 12. Jesse Field is City Clk.

MEETEETSE, WYO.—See item under Light and Power Plants.

MABTON, WASH.—The citizens on Jan. 4 voted to issue $21,800 bonds for the construction of water-works.

TACOMA, WASH.—The contract for the construction of a 7,000,000-gallon reservoir was awarded on Jan. 16 by the city to D. A. WILLIAMS, at $24,740. Other bidders were Joe Wells, $24,972; the Coast Constructing Co., $27,134. A. J. Whitney is Engr. W.-Wks.

PHOENIX, ARIZ.—Bids will be received by Robert A. Craig, Supt. W.-Wks., until 4 p. m., Feb. 10, for a 3,000,000-gallon pumping engine.

SEWERAGE.

BRIDGEPORT, CONN.—Rudolph Hering, 170 Broadway, New York, has presented his report to the Sewerage Commission on the question of the sewage disposal of the city and recommended dilution as the best method of disposal.

HARTFORD, CONN.—The City Engineer has prepared plans for Section C of the Homestead Ave. intercepting sewer and bids will be asked soon. The work will be started in the early spring.

•NIAGARA FALLS, N. Y.—Bids are asked by the Board of Public Works until Feb. 9 for the construction of an extension to the tunnel trunk sewer. Estimated cost, $70,500.

BROOKLYN, N. Y.—Bids are asked by Bird S. Coler, Boro. Pres., until 11 a. m., Feb. 10, for constructing sewers in various streets.

TONAWANDA, N. Y.—All bids opened by the Board of Public Works on Jan. 15 for the construction of a complete sewer system for Gastown have been rejected. New bids are being received for a system providing for the house and surface drainage.

LONG ISLAND CITY (L. I.), N. Y.—Bids are asked until 11 a. m., Feb. 3, by Lawrence Gresser, Pres. Boro. of Queens, for constructing a temporary sewer and appurtenances to connect with the St. Nicholas Ave. sewer, Second Ward, Borough of Queens; thence through Grove St. to the sewer in Wyckoff Ave., Borough of Brooklyn, and a pumping chamber to connect with a temporary relief sewer in Grove St., from St. Nicholas Ave. to Wyckoff Ave., Borough of Brooklyn.

P. F. BRENNAN, 244 Mt. Hope Ave., Bronx Borough, New York City, has secured the contract for constructing a sewer in Freeman Ave., from East River to Van Alst Ave., First Ward, at $20,182. Bids were opened on Dec. 23.

NEWBURGH, N. Y.—Bids will be received by the City Clerk until March 2 for the construction of a sewer in Robinson Ave., with laterals east and west through South St. William Blake, Jr., is City Engr.

BUFFALO, N. Y.—Francis G. Ward, Comr. of Pub. Wks., has decided to ask Council for an appropriation of $150,000 to lower the Bird Ave. sewer as required by the Government improvement work being done in Black Rock.

JERSEY CITY, N. J.—Bids were opened on Jan. 18 by the Street and Water Board for the construction of a sewer in Boyd Ave. Three contractors, Charles O'Neill, Bernard Gannon and O'Reilly Bros. submitted the same bid at 79% of Engineer's estimate. Upon drawing of lots O'REILLY BROS., 148 Ocean Ave., Jersey City, secured the contract. Estimated cost, $5,000. George T. Bouton is Clk. Bd.

CARLSTADT, N. J.—The citizens voted on Jan. 13 to issue $80,000 of bonds for the construction of a sewerage system here.

LONG BRANCH, N. J.—FRANK S. BRAND, West Long Branch, has been awarded the contract for laying sewer to connect the artificial pond on the Guggenheim estate with Takanassee Lake, a distance of 1,243 ft.

PERTH AMBOY, N. J.—HARDIMAN & DEDRICKSEN were awarded the contract on Jan. 18 by the Board of Aldermen for constructing the Kearney Ave. sewer. Seven bids were received.

WASHINGTON, N. J.—Clyde Potts, Consult. Engr., 17 Battery Place, New York, has been engaged by this borough to design a system of sewers and a sewage disposal plant. Dr. C. B. Smith is Mayor. A. J. Croft is Boro. Clk.

ERIE, PA.—Plans are now being prepared by B. E. Briggs, City Engr., for the construction of the new intercepting sewer system here.

PITTSBURG, PA.—According to orders received from the State Board of Health the city must take immediate steps toward the construction of a new sewage disposal system. It is estimated the project will cost between $15,000,000 and $20,000,000. N. S. Sprague is City Engr.

WILSON, PA.—Bids are asked until 7 p. m., Feb. 4, by Oliver Stokes, Boro. Clk., for the construction af a tile sewer with appurtenances.

BALTIMORE, MD.—Bids will be received until Feb. 3 by the Board of Awards, T. Barry Mahool, Pres., for constructing water tanks and tower at the sewage disposal works, on Back River, Contract No. 37. Peter Leary, Jr., is Chn. Sewerage Comn. Calvin W. Hendrick is Ch. Engr. Comn.

•BALTIMORE, MD.—Bids are asked by the Board of Awards until 11 a. m., Feb. 17, for constructing sanitary sewers Contract No. 35. The approximate quantities are as follows: 26,500 lin. ft. of 6-in. pipe house-connections; 32,700 lin. ft. of 8-in. pipe sewer; 5,450 lin. ft. pipe sewer, 10 ins. to 24 ins. in diameter. Harry W. Rodgers is Secy. Bd.

NORFOLK, VA.—The Board of Control has asked that improvements be made to the sewer pumping station in the Sixth Ward and has recommended to the Council that $16,000 be appropriated for the purchase of a pump, boiler and erection of brick plant. W. T. Brooke, City Engr., has recommended the purchase of a 12-in. centrifugal pump, with capacity of 5,000 gallons per min., 100-HP. boiler to provide steam, and erection of a brick building to replace present structure on Colley Ave.

•BIRMINGHAM, ALA.—Bids will be received until Feb. 3 by Maury Nicholson, City Engr., for the construction of certain storm sewer mains and branches thereto. Estimated cost, $175,000.

VICKSBURG, MISS.—The city will construct a storm sewer on Clay St. Bids are asked until Feb. 1. J. J. Hayes is Mayor.

LOUISVILLE, KY.—The Sewer Commissioners have awarded contracts to HENRY BICKEL, Louisville, for the construction of the Hoertz Ave, sewer and to SCHOLTZ & VOGT, Louisville, for the construction of the Aubin Ave. sewer. Bids were opened on Dec. 30. J. B. F. Breed is Ch. Engr. Comn.

•LOUISVILLE, KY.—Bids will be received until noon, Feb. 5, by the Commissioners of Sewerage, P. L. Atherton, Chn., for the construction of sewers known as Walnut St. Contracts Nos. 21 and 22; Clay St., Contract No. 23, and St. Xavier St., Contract No. 24, of the comprehensive system of sewerage. Advertised last week. J. B. F. Breed is Ch. Engr.

TOLEDO, OHIO.—Bids will be received until noon, Jan. 29 by the Board of Public Service, Reynold Voit, Secy., for furnishing material and constructing sewer No. 1050.

DAYTON, OHIO.—F. J. Cellarius, City Engr., is preparing plans for about six miles of sanitary sewer, 8 to 12-in., in District No. 4.

ASHTABULA, OHIO.—The city has voted to issue $20,000 of bonds for the construction of sewers in various streets. L. A. Amsden is City Engr.

SYLVANIA, OHIO.—We are officially advised that bids were received as follows by the city on Jan. 21 for constructing sewers and appurtenances: Lewandowski & Grzybowski, 239 East Central Ave., Toledo, Ohio, $7,058; Thomas T. Hurley, Marion, Ohio, $8,496; J. B. Truman, 204 South Sixth St., Lafayette, Ind., $9,011; H. W. Mathews, 310 West Lafayette St., Lorain, Ohio, $9,166; Emanuel L. Schneider, 420 West Liberty St., Ann Arbor, Mich., $9,271; John McMahon, 829 Colfax St., Toledo, Ohio, $11,671; M. J. Burke, Sandusky, Ohio, $12,512. The Riggs & Sherman Co., Toledo, Ohio, are Engrs.

LEBANON, IND.—The City Council has authorized the City Engineer to prepare plans for a sanitary sewer for the southern part of the city. Estimated cost, about $75,000.

ZEELAND, MICH.—H. A. Naberhius, Consult. Engr., McBridge Bldg., Holland, Mich., is preparing plans for a sanitary sewer system here to include septic tank and sand filter. Estimated cost, $10,000. Joy E. Heck is City Clk.

OTTAWA, ILL.—Bids are asked until 7 p. m., Feb. 2, by the Board of Local Improvements for the construction of a sewer in a portion of Fulton St. W. H. Irwin is Secy. Bd.

APPLETON, WIS.—Plans are being prepared by McClellan Dodge, City Engr., for a concrete sewer, 4½ ins. in diameter.

OSHKOSH, WIS.—The Common Council on Jan. 12 passed a bond ordinance for $26,500 for sewerage construction. George H. Randall is City Engr.

WATERLOO, IOWA.—The Sewer Committee, P. J. Rechtiertig, Chn., contemplates constructing a gravity sewer in the West Side. Estimated cost, $60,000. C. T. Wilson is City Engr.

MOORHEAD, MINN.—Bids are asked until 8 p. m., Feb. 1, by H. E. Roberts, City Clk., for constructing two lateral sewers here.

DETROIT, MINN.—Bids will be received until Feb. 10 by Charles G. Sturtevant, City Clk., for furnishing material and constructing a sewer system, consisting of a general sewer, district sewers in sewer districts Nos. 1 to 16, inclusive, and joint district sewer for sewer districts Nos. 1 to 5, inclusive, and sewer district No. 7, and joint sewer district sewer for sewer districts Nos. 8 to 15, inclusive; two sewer lifts, septic tank and storm-water sewer. Loweth & Wolff, 20 Old First National Bank Building, St. Paul, Minn., are Engrs.

ST. PAUL, MINN.—The Council on Jan. 14 made the following apportionment for the proposed sewers to be built during the year 1909: Hamline-Jefferson system, $50,000; Prior Ave. system, $22,000; Atwater St. system, $21,000; Otto Ave. system, $20,000, and other sewers, total, $28,000. Total, $141,000. L. W. Rundlett is City Engr.

LAWRENCE, KAN.—Bids will be received until 5 p. m., Feb. 1, by F. D. Smith, City Clk., for furnishing material and constructing a lateral sewer in Block No. 37, West Lawrence. F. D. Brooks is City Clk.

WINFIELD, KAN.—J. N. SHACKELTON has secured the contract for constructing a sewer in district No. 7, at $4,281.

MARION, KAN.—Bids will be received by the City Council until Feb. 2 for the construction of about 2¼ miles of main and lateral sewers in sewer district No. 3.

GALVESTON, TEX.—The Board of City Commissioners opened bids on Jan. 12 for the extension of the sewer in Tremont St. from a point in the alley between Aves. P and P½ to Ave. Q., being that section across the grade raising canal site which has been refilled to grade. Three bids were submitted Heffron & Falligan, of Galveston, were the lowest bidders.

FORT WORTH, TEX.—The city has engaged John Mead, City Engr., 2317 Lincoln Ave., North Fort Worth, to prepare plans and specifications for the construction of sewer system here.

HARTSHORNE, OKLA.—The city has voted $25,000 of bonds for sewer construction. W. E. Robbins is Secy.

HOBART, OKLA.—Bids were opened on Jan. 12 by Jesse Field, City Clk., for furnishing material and constructiong an extension to the sanitary sewer system, consisting of 915 ft. of 12-in., 1,900 ft. of 10-in. and 25,000 ft. of 8-in. vitrified clay pipe sewers, 48 manholes and 13 flush tanks. The contract has been awarded to T. C. BROOKS & SONS, of Jackson, Mich. Estimated cost, $25,000.

BARTLESVILLE, OKLA.—It is proposed to expend about $40,000 in the construction of sewers here. W. H. Aspinwall, of Bartlesville, is Engr.

MISSOULA, MONT.—Surveys are being made by W. A. Mayo, City Engr., for the construction of a sanitary sewer system here. Estimated cost, about $90,000.

LOS ANGELES, CAL.—The Board of Public Works has authorized the City Engineer to prepare estimates of the cost of constructing a storm sewer in Pico St. and other streets.

SAN FRANCISCO, CAL.—The Board of Public Works on Jan. 5 awarded to WILLIAM & BELSER the contract for laying a new sewer in Amazon Ave., between London and Athens St., at $12,192. Marsden Manson is City Engr.

SANTA CRUZ, CAL.—Bids are asked by J. L. Wright, City Clk., until 9 a. m., Feb. 15, for the construction of a sewer system, which will include three septic tanks, 62,912 ft. of 6-in., 4,343 ft. of 8-in., 2,290 ft. of 10-in., and 16,834 ft. of 12-in sewer pipe.

*BRANTFORD, ONT.—Bids will be received until noon, Feb. 11, by John Moffat, Chn. Bd. Wks., for furnishing and laying 2,250 ft. of 12-in, extra strength sewer pipe and 635 ft. of 12-in. c.-i. pipe, together with eleven manholes. T. Harry Jones is City Engr.

STREETS AND ROADS.

ALBANY, N. Y.—The Council has passed an ordinance providing for the construction of a paved road between Engle St. and Park Ave. and Swan St. and Park Ave. Estimated cost, $35,000. Walter Melius is City Engr.

BUFFALO, N. Y.—The contract for paving Kentucky St., 28 ft. wide with round edge shale brick on macadam base has been awarded by the City Council to F. V. E. BARDOL & CO., D. S. Morgan Bldg., Buffalo, at $6,500. F. G. Ward is Comr. Pub. Wks.

ITHACA, N. Y.—Patrick D. Conley, Contractor, Ithaca, will sublet contract for state road in Tompkins County, New York, No. 681, known as Ithaca-Dryden Road, Section No. 1, macadam road, 5.23 miles in length.

BUFFALO, N. Y.—Bids are asked until 11 a. m., Feb. 4, by the Department of Public Works for filling, grading, protecting and macadamizing to a temporary grade the Hamburg Turnpike, with a roadway 50 ft. wide, and constructing a 6-ft. sidewalk on the easterly side. F. G. Ward is Comr. Pub. Wks.

NEW YORK, N. Y.—Bids are asked until 2 p. m., Feb. 8, by John F. Ahearn, Pres. Boro. of Manhattan, for maintaining the asphalt pavement on various streets, where the original contracts have been abandoned; for repairing and maintaining the sheet asphalt pavement in the borough; and for repairing sidewalks on various streets and avenues.

LONG ISLAND CITY (L. I.), N. Y.—Bids are asked until 11 a. m., Feb. 3, by Lawrence Gresser, Pres. Borough of Queens, for regulating, grading and repaving with second-hand granite block pavement on a sand foundation the roadway of College Point causeway, including all grading, and the extension of the present culvert, as per plans from a point 200 ft. north of Myrtle Ave. to a point 3,400 ft. north of Myrtle Ave., Third Ward.

NEW BRUNSWICK, N. J.—Morgan F. Larson, County Engr., is preparing plans for the construction of ten county roads.

CLEARFIELD, PA.—RINEHART BROS., of East Liverpool, Ohio, have been awarded the contract for grading and paving about one mile of state highway at Clearfield at $15,000.

HARRISBURG, PA.—The city is considering the construction of a municipal plant for repairing sheet asphalt pavements. W. W. Caldwell is Comr. Highway Dept.

WILKES-BARRE, PA.—HORN & NEFF, of Slatington, Pa., have been awarded the contract by the State Highway Commissioner for constructing the new state road from the Borough of Plymouth to Hunlock Township, a distance of 25,534 ft., at $70,786. Birdsboro trap rock is specified for the macadam. Work will begin as soon as the weather permits in spring. Fifteen months are allowed for the completion of the work.

DORRANCETON (Wilkes-Barre post-office), PA.—Bids are asked by the Town Council until 7 p. m., Feb. 1, for paving, curbing and grading a portion of Rutter Ave., with vitrified fire-clay paving block on a concrete base. William A. Aten is Chn. St. Com.

WILSON, PA.—Bids are asked until 7 p. m., Feb. 4, by Oliver Stokes, Boro. Clk., for paving Locust St. with vitrified block or hillside block. Maneese & Early are Boro. Engrs.

BALTIMORE, MD.—Bids will be received by the Department of Public Parks and Squares until Feb. 3, for furnishing buff color brick or asphalt tile and block for projected improvements for park system, approximately 400,000 brick or asphalt tile and block or equivalent area will be purchased. J. Barry Mahool is Pres. Bd. of Awards.

DENTON, MD.—Caroline County has decided to improve the road betwen Federalsburg and Reliance, the work including grading and macadamizing of about 1¼ miles. The contract will soon be awarded; I. L. Dukes is Clk. County Comrs.

SALISBURY, N. C.—The city will macadamize several blocks of streets leading to the principal country roads.

*GREENWOOD, S. C.—Bids will be received by Kenneth Baker, Mayor, until noon, Feb. 18, for drainage, grading, curbing and paving the public square, with granite block, and with either vitrified brick, wood block, asphalt, or bitulithic. The work will embrace, approximately, 21,333 sq. yds. of pavement. Wilson, Sompayras & Uquhart are Consult. Engrs.

ATHENS, GA.—J. W. Barnett, City Engr., has recommended the continuance of the work of laying granolithic pavements and the installation of a new crushing plant.

JACKSONVILLE, FLA.—The Board of County Commissioners on Jan. 15 opened bids as follows for constructing a cement road from Enterprise St. to the highway section: Logan Coal & Supply Co., 84 cts. per sq. yd., and M. R. Garretson, Jacksonville, 8½ cts.

*PENSACOLA, FLA.—The Board of Public Works on Jan. 18 awarded the contract for constructing sidewalks here to WHIDDEN & KENNEDY, of Birmingham, Ala., at 10 cts. per cu. ft.

SELMA, ALA.—The city has awarded contracts for paving as follows: For brick paving on Broad and Water Sts., to CROCKETT PAVING CO.; asphalt paving on Broad St., to MEMPHIS ASPHALT & PAVING CO., Memphis, Tenn., at $84,500. V. B. Atkins is Mayor.

GADSDEN, ALA.—The City awarded the contract on Jan. 15 to CHARLES O. DUNCAN, of Gadsden, for the construction of 5,000 sq. yds. of cement sidewalks at 85 cts. per yd., and 150 sq. yds. of driveway at $1 per yd, on Eleventh, Twelfth, Chestnut and Bay Sts.

ANNISTON, ALA.—The city has awarded the contract to E. J. O'BRIEN, of Anniston, for constructing a boulevard from Edgemont Cemetery to the city limits of Oxford, boulevard to be 60 ft. wide. J. D. Hunter is City Engr.

CHATTANOOGA, TENN.—The Board of Public Works has awarded the contract for paving Broad St. to the WEST CONSTRUCTION CO., Chamberlain Bldg., at $48,460, and Hooke St., to the SOUTHERN PAVING & CONSTRUCTION CO., Chamberlain Bldg., at $13,160.

JEFFERSONVILLE, KY.—THOMAS F. O'NEIL has been awarded the contract by the city for improving Sixth St. with granitoid sidewalks, stone curbing, vitrified brick gutters and street crossing at $7,068.97. W. O. Sweeney bid $7,792 for the work.

LEXINGTON, KY.—The Board of Public Works on Jan. 20 awarded to BUFORD A. GRAVES the contract for the construction of concrete sidewalks on the following streets: South side of High St., from Upper to Mill Sts., 10 ft. wide; west side of Upper St., from High St. to Maxwell St., 6½ ft.; north side of East Third St., from Race to Walton Aves., 4 ft. The prices were as follows: Cement walk, 13½ cts. per sq. ft.; cement curb, 45 cts per ft.; cement curb and gutter combined, 60 cts per ft.

OAKWOOD, OHIO.—Bids are asked by H. E. Parrett, Village Clk., until Feb. 18, for the improvement of Oakwood Ave. by paving a portion with brick.

LISBON, OHIO.—The following bids have been received by the County Commissioners for the construction of the Jethro Hollow road in Liverpool Township: George D. Smith & Bro., Salem, Ohio, 33 cts., highway excavation, 61 cts. rock excavation; John R. Armstrong, Lisbon, 30 and 60 cts.; Rinehart Bros., East Liverpool, Ohio, 29 and $1.25.; Davis-Duffy Co., East Liverpool, 22 and $1; Allison & Happell, East Liverpool, 30 and 49 cts.; John McLaughlin, East Liverpool, 27½ and 60 cts.; W. D. Hammond, Jacobsberry, Ohio, 26¾ and 41½ cts.; W. N. Wright, Lisbon, 35 and 75 cts.; George B. Patterson, Wellsville, Ohio, 28 and 48 cts. The award of the contract has not been made.

MILFORD, OHIO.—Bids will be received by the Council until noon, Feb. 16, for furnishing the necessary labor and materials for repairing the Cincinnati, Columbus & Wooster Turnpike Co.'s pike through the village of Milford, in both Clermont and Hamilton Counties, Ohio, from gutter to gutter, with No. 2 broken stone. James Sheehy is Village Clk.

CINCINNATI, OHIO.—Bids are asked until noon, Feb. 5, by the County Commissioners, Fred Dreihs, Clk, for the improvement of Kilby Road, from Valley Junction to Cilley's Corner, Whitewater Township.

AKRON, OHIO.—We are officially advised that bids were received as follows by J. C. Wonders, State Highway Comr., on Jan. 21, for the Copley Road, Summit County: D. A. Phillips, Ashland, Ohio, $8,100; John McCausland, Cuyahoga Falls, Ohio, $8,850; The BLUFFTON STONE CO., Lima, Ohio, $7,624 (awarded contract); Waldeck & Ready, Warren, Ohio, $8,009; John O'Neal, Akron, Ohio, $6,500; Doll & Sinn, Akron, $8,550; E. McShaffey, Akron, $8,829; A. R. Taylor, Findley, $8,500; Wildes & Davidson, Akron, $8,575; McAlonan Bros., Akron, $8,112. John O'Neal claiming a mistake in making up his bid was permitted to withdraw.

ST. BERNARD (Cincinnati post-office), OHIO.—Bids are asked by George Schroeder, Village Clk., until noon, Feb. 17, for the improvement of Murray Road, from Carthage Pike to the Miami and Erie Canal, by grading the same to its full width, paving with macadam the roadway, constructing concrete curb and gutters, laying cross-walks, furnishing materials and constructing the necessary drains, culverts and retaining walls.

INDIANAPOLIS, IND.—The Board of Public Works will soon ask for bids for the following street improvements: Grading and graveling Grace St.; grading and graveling Oakland Ave.; grading and graveling Dearborn St.; grading and paving sidewalks of 20th St.; grading and paving roadway of Jefferson Ave.; grading and paving Owosso Ave.; grading and paving Georgia St.; grading and paving Lowell Ave.; grading and paving 37th St., and for grading and paving the sidewalks in Alabama, Roosevelt, Ethel, Holton, 29th, Chester and Oxford Sts. J. T. Elliott is Chn. Bd.

BLOOMFIELD, IND.—Bids will be received until March 2 by the County Commissioners, Bloomfield, for constructing a gravel and macadamized road in Stockton and Wright Townships and also same time and place for constructing a similar road in Wright Township. Peter M. Cook is County Audr.

LA FAYETTE, IND.—The County Commisioners of Tippecanoe and Warren Counties on Jan. 15 awarded the contract to LEVANDOWSKI & KRUSE, of Monticello, Ind., for constructing the Hilderbrand County line gravel road at $7,549. The Hilderbrand road is a little over three miles long, and runs on the county line between Shelby Township and Medina Township.

WASHINGTON, IND.—Bids are asked until Feb. 1 by the County Commissioners for the construction of a gravel road. Thomas Nugent is County Audr.

LAPORTE, IND.—Bids are asked until Feb. 4 by the County Commissioners for two macadamized roads, 2.3075 and 2.8062 miles in length, respectively. C. H. Miller is County Audr.

LEBANON, IND.—Bids are asked until Feb. 5 by the County Commissioners for 9,160 ft. of gravel road. B. F. Herdwick is County Audr.

ANDERSON, IND.—Bids are asked by the County Commissioners until Feb. 5 for the construction of a gravel road on the county line. W. T. Richards is County Audr.

FRANKLIN, IND.—Bids are asked by the County Commissioners until Feb. 8 for 7,093 ft. of gravel road in Union Township, Johnson County. W. B. Jennings is County Audr.

GREENFIELD, IND.—Bids are asked by the County Commissioners until Feb. 18 for 3,960 ft. of gravel road. C. H. Troy is County Audr.

LA FAYETTE, IND.—Bids are asked by the County Commissioners until Feb. 12 for the construction of two gravel roads. J. P. Foresman is County Audr.

TERRE HAUTE, IND.—Bids are asked until Feb. 6 by the County Commissioners for the construction of four steam roads. N. G. Wallace is County Audr.

DETROIT, MICH.—Bids are asked until 7.30 p. m., Feb. 1, by the city for paving a portion of South Gratiot Ave. and other streets. Paul Matthews is City Clk.

PARIS, ILL.—Bids will be received until Feb. 15 by the Board of Local Improvements, Walter Logan, Clk., for 21,000 sq. yds. of brick pavement. William Blackman is Engr., Paris.

NAPERVILLE, ILL.—The Board of Local Improvements have awarded the contract to HAYES & SONS, of Dunkirk, Ind., at $77,000 for draining, grading, curbing, paving with macadam a system of streets, requiring approximately 13,640 ft. of 6 to 18-in. sewer pipe, 160 storm-water inlets, furnished and set; 36 manholes, 56,000 lin. ft. 5 × 20-in. concrete curb and 87,600 sq. yds. of macadam. Bids were opened on Jan. 18. W. S. Shields is Engr., 1201 Hartford Bldg., Chicago, Ill.

INDIANOLA, IOWA.—Bids will be received by Arthur Lee, City Clk., until Feb. 8 for about 15,390 sq. yds. of 3-in. creosoted wood block paving on a 5-in. concrete foundation, about 7,884 lin. ft. of 6 × 20-in. concrete curb, and about 450 cu. yds. of extra grading.

SHENANDOAH, IOWA.—The contract for paving with brick and curbing Battle Ave. and Elm St., about 7,000 sq. yds., has been awarded to RANKIN & SCHWARTZ, of Shenandoah, at $1.80 per sq. yd. Bids were opened on Jan. 13. Thomas W. Keenan is City Clk.

ST. PAUL, MINN.—Bids will be received until 10 a. m., Feb. 15, by the County Commissioners, St. Paul, for improving Bald Eagle Lake Ave., bids to be on macadamizing or gravel. Edward G. Krahmer is County Audr.

MOORHEAD, MINN.—Bids will be received by the City Clerk until Feb. 1, for 20,000 sq. yds. of brick or creosote wood block pavement. A. M. Hopeman is City Engr.

JUNCTION CITY, KAN.—HENRY SCHAMBURG has been awarded the contract, at $5,365.50, for road work and earth filling.

OLYMPIA, WASH.—Bids have been received by the State Highway Board for the construction of State Aid road No. 27, known as the North Trunk road in King County as follows: L. H. GOERIG, Seattle, Wash., $9,895 (awarded contract); G. W. Wilson, $10,450; Mills Brothers, $11,495; John Kalberg, $11,850; Northwest Construction Co., $11,900; George A. Bandaret, $12,625; Josiah Jones & Son, $12,990; J. Mitchell, $13,970.

REDLANDS, CAL.—The City Engineer has prepared plans for macadamizing Reservoir St.

LONG BEACH, CAL.—The Council is considering the construction of the proposed concrete walk along the beach as far west as the harbor and also a concrete retaining wall. Estimated cost, $100,000. L. A. Paine is Deputy City Clk.

SAN MATEO, CAL.—Davenport Bromfield, City Engr., was directed by the City Council on Jan. 11 to prepare specifications and preliminary estimates of the cost of constructing a number of asphalt and asphaltic concrete streets. Estimated cost, about $500,000.

SAN BERNARDINO, CAL.—See item under Bridges.

TORONTO, ONT.—The paving of portions of St. Patrick St., Anderson, Agnes and Wilton Aves. with granite block is under consideration by the city. Estimated cost, about $277,120. C. H. Rust is City Engr.

MANUFACTURING [illegible]NTS.

(* *denotes that this work is* [illegible]*tised in Engineering New*[illegible]

MANCHESTER, N. H.—T[illegible] McElwain Shoe Factory at East Manche[illegible] N. H., is to be enlarged one-third, acco[illegible] to press reports, and the new part o[illegible]r stories and 100 ft. long will be erect[illegible]he south end of the building. The sho[illegible]l be increased in all departments one-[illegible] and the employment list will increase [illegible]he same proportion. Excavating for th[illegible]undation has commenced, and the add[illegible] will be erected at once.

NEW BEDFORD, MASS.—Th[illegible] Hersom & Co. have decided to locate th[illegible]oap factory in Acushnet, on the west [illegible] of the Acushnet River. The proposed [illegible]s at the foot of Perry St., and has a fro[illegible] of 309 ft. on that street, and 102 ft. o[illegible] shore. At low tide it is stated that th[illegible] is sufficient water to carry out the [illegible] of constructing a sanitary renderin[illegible]ablishment. The structure will be a [illegible]k tight building, and by the use of fa[illegible] different parts of the structure foul o[illegible]s well as the odors from vats will pass [illegible] a large wooden tower which will be cons[illegible]y filled with water from the river.

NEW BEDFORD, MASS.—Re[illegible]g the proposed improvements to the p[illegible] of the Page Mfg. Co., it is stated that a[illegible]penditure of $200,000 will be made and t[illegible] 12,000 spindles and 500 looms will be [illegible]d. An addition 210 ft. long by 152 ft. w[illegible] will be made to the weave shed, and th[illegible]inning mill, which has one story, will [illegible]ve two additional stories built.

WORCESTER, MASS.—We are officially advised that the Royal Worcester Corset Co. will build a 5-story addition, 53 × [illegible] ft., of brick and stone mill construction. The work will cost $50,000 and contracts will be let about Feb. 15. Arthur F. Gray, [illegible] State St., Boston, Mass., is Arch.

DANIELSON, CONN.—Equipment is to be installed at once in the addition which has been erected by the Danielson Cotton Co. It will consist of 96 looms. A second enlargement is expected to be erected and equipped by spring.

NORWALK, CONN.—Charles N. Wood, Engr., Norwalk, has been engaged to lay out a plot for a factory, 90 × 135 ft., on the Wilson Road, between the railroad and trolley. Provisions have also been made for possible additions. It is stated that Lewis H. Nash will operate a water meter factory here.

BUFFALO, N. Y.—We are officially advised that the Automatic Transportation Co., Lewis Block, will take bids between Feb. 1 and Feb. 5 for construction of a 2-story brick and steel factory, 50 × 150 ft. Estimated cost, $18,000 to $20,000. George J. Metzger, 19 West Huron St., Buffalo, is Arch.

The Frontier Ice Co., Gordon F. Matthews, Secy., 997 Ellicott Sq., will build an ice manufacturing plant, 80 × 138 ft., of brick, concrete and steel at Lathrop St. and New York Central Belt Line tracks, to cost $40,000. Plans have been prepared by J. A. Matthews, Arch., 444 Rhode Island St. Bids will be received by the Secretary of the company.

The Graphic Arts Co. will build a 1-story brick addition to its plant at Phelps and Halbert Sts. Plans have been completed by Schmill & Gould, Archs., 1338 Prudential Bldg., who will receive bids at once.

Plans are under consideration for an extension to the plant of the Frontier Iron Works, 2 Audubon Ave., Buffalo, N. Y.

NIAGARA FALLS, N. Y.—The Carborundum Co., F. W. Haskell, Pres., will enlarge its plant at Buffalo Ave. and 18th St. by erecting a 4-story factory structure, of brick and steel, 225 × 60 ft.

Chester R. Phelps, Arch., 163 Gluck Bldg., is preparing plans for a 2-story brick factory building, 80 × 25 ft., which the International Nut Co. will add to its plant at Cayuga and 24th Sts. and the N. Y. C. R. R. tracks. R. A. Ellis is Pres.

NORTH TONAWANDA, N. Y.—The Niagara Silk Mills has filed an application with the Common Council for a permit to construct an addition to its factory on Sweeney St. The company proposes to construct the addition of concrete blocks. The addition will be used as a dry house for drying the silk used in the manufacture of gloves.

BINGHAMTON, N. Y.—The Star Electric Co., 277 Front St., Binghamton, N. Y., manufacturer of fire alarm appliances, has closed a contract with the American District Telegraph Co., New York, whereby the latter company agrees to take the entire output of the factory, guaranteeing a sale of not less than $1,000,000 worth of its product during the life of the contract, which covers five years. This contract will necessitate an addition to the present plant, for which plans are being prepared.

MEDINA, N. Y.—The Burt Olney Co. have plans completed for a canning factory to be built at a cost of $50,000 on a site purchased on the New York Central R. R.

PATERSON, N. J.—F. J. Day & Co., manufacturers of ribbons in the Atherton Mill at Mill and Passaic Sts., will erect a 3-story brick and concrete mill at Harrison and Summer Sts. in the near future, to cost $30,000. The firm intends to add a number of new looms and will occupy both the second and third floors, while the first will be let. The concern will employ upwards of 100 hands when its new mill is finished, which will be some time next summer.

NEWARK, N. J.—Work will be begun at once rebuilding the plant of L. Goldsmith & Sons at Canal and Cherry Sts. A contract providing for the erection of seven 4-story brick buildings has been awarded to the Henry M. Doremus Co. The plans drawn by Henry Baechlin, Arch., 45 Clinton St., Newark, for the structures call for an expenditure of about $50,000. The Goldsmith plant was destroyed by fire several months ago.

SHAMOKIN, PA.—We are officially advised that Jury, Kessler & Lee, of Shamokin, are preparing plans and will receive bids until about Feb. 1 for erecting a 4-story [illegible] × 270-ft. mill building and a 1-story boiler and engine house, 40 × 60 ft., for the Shamokin Throwing Co. Pressed brick, terra cotta and stone will be used, and the cost is to be $70,000 for building and $1[illegible],000 for equipment. The only contract let is that for heating and ventilating, to the CARRIER AIR CONDITIONING CO., 39 Cortlandt St., New York.

ETNA, PA.—The WILLIAM B. SCAIFE & SONS CO., 221 First Ave., Pittsburg, Pa., has secured from Spang, Chalfant & Co. a contract for a large tonnage of structural steel work in connection with the extensive additions which are being made to the latter firm's tube plant at Etna, Pa.

PHILADELPHIA, PA.—John Wyeth & Bro., Inc., Eleventh St. and Washington Ave., have purchased a plot of ground at the corner of Twelfth St. and Washington Ave. The lot covers 100 × 180 ft. and upon this will be built a 3-story brick and cement building. It will be fireproof.

ERIE, PA.—Contract has been awarded to the PITTSBURG BRIDGE & IRON CO., Rochester, Pa., by the Erie Forge Co., through F. Felkel & Son, Engrs., 424 Fourth Ave., for erection of three open-hearth buildings, [illegible] × 19.2 ft., 35 × 128 ft. and 60 × 94 ft., respectively; one story in height. Total cost, [illegible]50,000.

SCRANTON, PA.—We are officially advised that the ROCKWELL FURNACE CO., 26 Cortlandt St., New York, has been awarded the contract covering the complete furnace equipment for the locomotive shops of the Delaware, Lackawanna & Western R. R. Co. at Scranton, Pa. The furnace equipment consists of 35 furnaces operated with 300 B. T. U. water gas. The shops will be capable of turning out complete locomotives, and are to be in operation in three months.

PITTSBURG, PA.—The National Gear Wheel & Foundry Co., South Ave., Pittsburg, manufacturer of machine molded gearing and gas engines, proposes to erect a reinforced-concrete building, 23 × 120 ft., three stories high, on South Ave., between its two present buildings. When completed the new addition will contain a pattern shop, storage department, offices, etc. At present the pattern shop is on the first floor with the foundry, and when the former is removed to the new building the foundry facilities will be increased about 25%.

NEW BRIGHTON, PA.—The Brighton White Metal Co. of this town has been formed and will manufacture Babbitt metal, solder, linotype metal and tin plate metal. The McGuigan machine shop on Sixth Ave. has been leased, and will be remodeled and equipped complete at once. W. D. Berry, of the Brighton Brass & Bronze Co., of New Brighton, is at the head of the new concern, and J. S. McMaster will be Gen. Mgr.

ELLWOOD CITY, PA.—The McLaughlin Mfg. Co., of Philadelphia, Pa., has taken an option on a property on Sixth St. and proposes to build a plant for manufacturing interlocking steel rails, railroad spikes, fish plates, etc. The company operates similar plants at Philadelphia, Greensburg, Pa., and Salem, Ohio. W. G. McLaughlin, of Philadelphia, is at the head of the concern. Others interested are Samson Moore, of New Castle, Pa.; J. B. Summerville, Wheeling, W. Va., and James Leedon, of Philadelphia.

BALTIMORE, MD.—The Lauer & Suter Co. has completed arrangements for doubling the size of its candy manufacturing plant at 1420 Philpot St. Plans for a building, four stories high and measuring 41 × 110 ft., have been finished and contracts for erecting the structure have been awarded. The addition will be erected in the rear of 1439 to 1447 Block St., adjoining the present factory, and it is estimated to cost about $10,000. The builder is M. Z. HAMMEN.

WILLIAMSON, W. VA.—The Norfolk & Western Ry. Co. has awarded contract to the MILLET CONCRETE CONSTRUCTION CO. for putting in concrete foundations for railway shops at Williamson, W. Va., which will cost $200,000. C. S. Churchill, Roanoke, Va., is Ch. Engr.

WHEELING, W. VA.—The Wheeling Mold & Foundry Co. contemplates erecting a 150-ton iron furnace, to be 80 × 60 ft. at base and 98 ft. high. The furnace building to be 340 × 60 ft. Estimated cost, between $200,000 and $300,000.

ASHBORO, N. C.—We are officially advised that the Acme Hosiery Mills will build its proposed plant at once, locating at Ashboro, N. C. The company has elected O. R. Cox, Secy.-Treas., and will build two 2-story brick structures, 60 × 100 ft., to be equipped with 100 knitting machines and accompanying apparatus, for the production of hosiery. A 70-HP. steam plant will be installed to drive the machinery. The daily output will be 400 dozen pairs of hose, and 60 operatives will be employed. The company is capitalized at $100,000. J. E. Walker is interested. Noted on Dec. 17 and Jan. 7.

GREENVILLE, S. C.—We are officially advised that the Brandon Mills, of this city, will build an additional plant of 25,000 spindles and 700 looms for the production of print cloth and converters' goods. The company has engaged Lockwood, Greene & Co., 93 Federal St., Boston, Mass., as Engrs.-in-Charge, and has let contract to J. W. [illegible]GIE, of Greenville, for the erection of the building, which will be 353 × 128 ft., four stories high. Contracts for the machinery are expected to be awarded at once, and the mill is to be ready for operation for the next crop of cotton, employing about 200 operatives.

LANCASTER, S. C.—Leroy Springs, of Lancaster, S. C., has awarded contract to the WESTINGHOUSE ELECTRIC & MFG. CO., of Pittsburg, Pa., to install machinery for the electrical drive in three cotton mills, a total of about 3,000 HP. being required. He is president of the three companies owning the mills, the Lancaster Cotton Mills at Lancaster, and the Springstein Mills at Chester, S. C. The three mills operate more than 100,000 spindles and 2,500 looms, producing yarns, sheetings and ginghams.

SAVANNAH, GA.—It is stated that a company will be incorporated with $15,000 capital stock by J. T. Shuptrine, Gordon Shaussy, J. F. Tietjen and others to establish a cannery with 20,000 cans daily capacity. The building will be erected to cover about one acre of ground and will cost $15,000. Contract for erection has been awarded to CHICAGO BUILDING & MFG. CO., 240 West Lake St., Chicago, Ill.

BESSEMER, ALA.—Dr. G. B. Crowe and associates have purchased 80 acres of land near the plant of the U. S. Cast Iron Pipe & Foundry Co. and work will soon commence on the sites for four plants. The first will be a $65,000 fire brick plant for a company now at Ashley, Ala. Besides this, 250 coke ovens will be built, so arranged that they can be added to as the demand grows for the output. In addition to the manufacture of coke, the gas and smoke will be utilized for the manufacture of power. There will be built, it is stated, two blast furnaces. The capacity of the two stacks will be from 250 to 300 tons daily. The amount of money to be expended in improvements will be from $750,000 to $1,000,000.

NEW DECATUR, ALA.—The Cotton Growers' Industrial Co. will erect five structures to cost $35,000, as follows: Main structure, 180 × 60 ft.; foundry, 90 × 40 ft.; engine and boiler house, 60 × 30 ft.; painting, drying and storage house, 30 × 80 ft. The buildings will be of concrete and brick, slow-burning fireproof construction. Electrically installed machinery will cost about $25,000. Daily capacity, about 50 farm implements. R. H. Gulley is Gen. Mgr.

KANSAS CITY, MO.—The Kansas City Railway & Light Co., Kansas City, is having plans completed for erection of a car house to include nine tracks, each 100 ft. long. It is expected that this structure will be erected in the spring. Bernard Corrigan, Kansas City, is Gen. Mgr.; Charles E. Fritts is Ch. Engr.

NEWPORT, ARK.—The Iron Mountain R. R. Co. contemplate establishing shops here at a cost of $75,000. L. T. Wright, Keswick, Cal., is Gen. Mgr.

FORT WORTH, TEX.—B. S. Boyd and Fred. H. White, of Charlotte, N. C., are interested in the establishment of a $300,000 cotton mill in this city.

OKLAHOMA CITY, OKLA.—It is stated that the Oklahoma Stove & Structural Iron Co. will erect a plant, to consist of brick moulding room, 70 × 200 ft., and mounting room, 60 × 100 ft. The buildings will cost $25,000 and machinery $20,000. It has not been decided when bids will be received for the machinery. W. H. Watkins, 118½ North Broadway, Oklahoma City, is Pres. W. F. Bush is Arch.

SUMMIT, CAL.—The San Francisco "Chronicle" states that the Southern Pacific Co. has prepared plans for a roundhouse and a 95-ft. turntable, to be erected at Summit,, the highest point on the line of the Central Pacific route. W. Hood, San Francisco, is Ch. Engr.; H. J. Small, San Francisco, is Gen. Supt. Motive Power.

SAN BERNARDINO, CAL.—The VILTER MFG. CO., 872 Clinton St., Milwaukee, Wis., has been awarded a contract for machinery capable of producing 225 tons of ice a day, the refrigerating apparatus to be operated in a storage house having a capacity of 12,000 tons. The contract was awarded by the Gate City Ice & Precooling Co., San Bernardino, Cal.

TORONTO, ONT.—It is stated that the Toronto Ry. Co. will build car barns in the spring. It is expected that the barns will cover an area about 100 × 350 ft. They will accommodate about 100 cars, and will be of concrete and brick construction. R. J. Fleming is Gen. Mgr.

MEMPHIS, TENN.—A building permit has been issued to the ACME CONSTRUCTION CO., of Cincinnati, Ohio, for construction of a 4-story factory building at Keel St. and the Illinois Central R. R., to cost $51,000. This mill be the American Snuff Co.'s factory, and it is reported that the company has purchased several adjoining lots, on which will be built a number of small buildings that will cost about $20,000 and will be used for various purposes. The main building will be of reinforced concrete and fireproof. The entire cost, after the machinery is installed, it is estimated, will be about $75,000. The factory will give employment to over 300 operatives. The building will be completed in about 90 days.

CLEVELAND, OHIO.—The River Furnace & Dock Co., a corporation organized by Corrigan, McKinney & Co., Perry-Payne Bldg., will begin the erection of two furnaces to cost $2,000,000 as soon as the weather permits. The plant will be located in the upper river section.

BURLINGTON, IOWA.—H. I. Goddard, Tama Bldg., advises us that he is preparing plans for a 5-story building, 60 × 116 ft., the basement and first story to be of reinforced concrete, the balance of the building to be of mill construction, and same to have sprinkler system installed. Plans and specifications for this building will be ready for the contractors early in February. Noted on Jan. 14.

ST. PAUL, MINN.—Plans are being prepared by Pabst Brewing Co. for a brick and reinforced-concrete stock-house to be built here at the foot of John St. John Arend, city, is agent of the company. Cost, $40,000.

MISCELLANEOUS CONTRACTS.

U. S. RECLAMATION SERVICE.—Items regarding irrigation, canal projects, etc., will be found under Water Supply—Irrigation.

FENCES.—Fort Barrancas, Fla.—Bids are asked until 11 a. m., Feb. 18, by A. L. Rhoades, Q. M., U. S. A., for constructing fences at Fort Barrancas.

LUMBER.—New York, N. Y.—Bids are asked until 2 p. m., Feb. 4, by J. W. Stevenson, Comr. of Bridges, for furnishing and delivering lumber to the Williamsburg (New East River) bridge.

DREDGE.—Toronto, Ont.—Bids are asked until noon, Feb. 2 (an extension of time from Jan. 19) by Joseph Oliver, Mayor and Chn. Bd. of Control, for constructing a hydraulic dredge complete.

DITCH.—Hume, Ill.—Bids will be received until Jan. 30 by the Drainage Commissioners of Hume, at the law office of Frank J. Bowman, Sterling, Ill., for digging drainage ditch, requiring the removal of 24,214 cu. yds. of earth.

DREDGING.—Bayou Goula, La.—Bids were received on Jan. 16 by J. W. Supple, Pres. Bayou Tigris Dredging Dist., for excavating and dredging 280,000 cu. yds. of dirt in the Bayou Tigris Drainage District, near the town of Bayou Goula. All bids were rejected.

DITCH.—Des Moines, Iowa.—Bids were received on Jan. 18 by the Board of Supervisors at Des Moines for excavation and construction of drainage ditch in Drainage District No. 6, consisting of about 37,421 cu. yds. of excavation. **The lowest bid was** submitted by the Interstate **Drainage & Investment Co., of Britt, Iowa, at 15 cts. a cu. yd. Lew. Burnett is County Audr.**

DITCH.—Ft. Dodge, Iowa.—Bids were received on Jan. 15 by the Board of Supervisors of Webster County at the office of J. L. Hanrahan, County Audr., Ft. Dodge, for constructing 38,800 ft. of open ditch and drain, with 142,000 cu. yds. of excavation, in Webster County Drainage District No. 37, Dayton and Lost Grove Townships. Contract has been awarded to R. H. McWILLIAMS, of Mattoon, Ill., at 8.97 cts. a cu. yd.

TILE, ETC.—Girard, Ill.—Bids will be received until Feb. 5 by the Drainage Commissioners of Union Drainage Dist. No. 1 for furnishing f. o. b. cars Girard or Virden, at the option of the Commissioners, 36,657 ft. of 10, 12, 14, 15, 16, 18, 20, 24 and 27-in. salt-glazed vitrified drain tile; 6,900 ft. of 7 and 8-in. butrned red or shale drain tile; also for constructing a concrete retaining wall in connection with this work; also for hauling and distributing pipe, and also for laying this pipe. V. B. Stutsman, Chn.

(Continued on page 33.)

CONTRACT PRICES.

[Where * precedes item under Contract Prices, the work was advertised in Engineering News.]

SEWER SYSTEM.—Sylvania, Ohio.—Bids were received by the Village Council on Jan. 21 for furnishing the material and constructing a sewer system here. W. B. Harris is Village Clk. Riggs & Sherman, 613 The Nasby, Toledo, are Engrs. Bids in detail were as follows—(A) Lewandawski & Grzybowski, 239 East Central Ave., Toledo, Ohio; (B) Thos. T. Hurley, Marion, Ohio; (C) J. B. Truman, 204 South Sixth St., Lafayette, Ind.; (D) H. W. Mathews, 310 West Lafayette, St., Lorain, Ohio; (E) Emanuel L. Schneider, 420 West Liberty St., Ann Arbor, Mich.; (F) John McMahon, 829 Colfax St., Toledo, Ohio; (G) M. J. Burke, Sandusky, Ohio:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)
3,995 ft. 8″ sewer pipe, laid	$0.15	$0.15	$0.13	$0.18	$0.16	$0.25	$0.26
615 ft. 10″ sewer pipe, laid	.20	.20	.21	.24	.20	.28	.32
3,228 ft. 12″ sewer pipe, laid	.25	.23	.24	.36	.34	.32	.37
130 cu. yds. trenching and backfilling, under 6′	.22	.25	.36	.20	.68	.50	.48
830 cu. yds. trenching and backfilling, 6′-8′	.30	.33	.36	.30	.68	.60	.53
3,115 cu. yds. trenching and backfilling, 8′-10′	.35	.42	.51	.45	.68	.70	.70
1,400 cu. yds. trenching and backfilling, 10′-12′	.55	.65	.68	.60	.68	.80	1.00
1,030 cu. yds. trenching and backfilling, 12′-14′	.70	.85	1.09	.90	.68	1.00	1.30
915 cu. yds. trenching and backfilling, 14′-16′	.90	1.20	1.23	1.10	.68	1.20	1.50
cu. yds. trenching and backfilling, 16′-18′	1.50	.....	3.00	1.75	1.25	1.50	....
cu. yds. trenching and backfilling, 18′-20′	2.00	.....	7.00	3.00	2.00	2.00	....
12 manholes (each)	30.00	35.00	36.00	40.00	32.00	45.00	40.00
4 drop manholes (each)	40.00	40.00	53.00	45.00	40.00	50.00	45.00
3 flush tanks (each)	50.00	65.00	62.00	65.00	55.00	75.00	70.00
12 ft.-45/100-ton c.-i. pipe, laying, per ft	1.00	.30	5.00	1.00	2.00	1.50	.50
12 ft.-45/100-ton c.-i. pipe, furnishing, per ton	45.00	32.00	40.00	35.00	50.00	60.00	30.00
200 cu. yds. embankment	.35	.40	.40	.40	.40	1.00	50.00
Sewers	5,984.00	6,836.00	7,536.00	7,442.00	7,741.00	9,405.00	10,214.00
Disposal Beds:							
1 screen chamber	75.00	100.00	46.00	100.00	111.00	50.00	250.00
480 ft. 6″ sub drains	.30	.06	.09	.15	.12	.50	.50
345 yds. sand for filters	1.00	1.50	1.50	1.80	1.70	1.50	2.00
135 yds. gravel for filters	2.00	3.50	2.30	3.'0	1.70	1.00	2.00
780 M. ft. B. M. lumber in carriers	35.00	33.00	45.00	85.00	80.00	60.00	50.00
1 manhole	30.00	35.00	36.00	40.00	32.00	45.00	40.00
385 lin. ft. 10″ sewer pipe, laid	.60	.25	.37	.35	.22	1.00	1.00
18 cu. yds. masonry, concrete	6.00	8.00	8.50	7.00	7.00	7.00	8.00
480 cu. yds. excavation in filters	.30	.50	.40	.40	.50	1.50	.50
Extra concrete, per cu. yd	5.00	8.00	7.00	6.00	7.00	6.00	7.00
4″ house connections, per ft	.40	.47	.41	.30	.30	.45	.60
6″ house connections, per ft	.50	.50	.45	.40	.34	.50	.60
Old sheeting in trench, per M. B. M	15.00	30.00	45.00	40.00	25.00	30.00	25.00
New sheeting in trench, per M. B. M	30.00	30.00	45.00	40.00	35.00	35.00	25.00
Extra earth excavation, per cu. yd	.60	.50	1.25	1.00	.75	1.25	.75
Rock excavation, per cu. yd	5.00	3.00	5.00	4.00	5.00	8.00	3.50
Timbering in foundation, per M. B. M	30.00	30.00	40.00	40.00	35.00	40.00	25.00
Time to complete		Aug. 1, 1909.		6 months	90 days	120 days	100 wk dys
Disposal	$1,074	$1,660	$1,476	$1,725	$1,530	$2,265	$2,298
Totals	$7,058	$8,496	$9,012	$9,167	$9,271	$11,671	$12,512

*BRIDGE SUPERSTRUCTURE.—Chicago, Ill.—Bids were received by the Board of Trustees of the Sanitary District of Chicago, American Trust Bldg., Chicago, on Jan. 20 for the superstructures of the Chicago & Northwestern Ry. Co. The work consists of the fabrication, erection and completion of the superstructures of two railroad bridges crossing the North Shore Channel of the Sanitary District of Chicago, as follows: A railroad bridge for the Mayfair cut-off of the Chicago & Northwestern Ry. Co. in Township of Niles, to be completed on or before Sept. 15, 1909; a railroad bridge for the Milwaukee division of the Chicago & Northwestern Ry. Co. at Grant St., Evanston, Cook County, Ill., to be completed on or before Sept. 15, 1909. I. J. Bryan is Clk. The bidders and bids in detail were as follows: (aa) Superstructure of Mayfair bridge, 392,000 lbs., lump sum; (bb) superstructure of Milwaukee division bridge, 750,000 lbs., lump sum: (A) Geo. W. Jackson, Inc., Chicago, Ill., (aa) $21,851, (bb) $10,464; (B) The Toledo-Massillon Bridge Co., Toledo, Ohio, (aa) $22,100, (bb) $11,730; (C) Fort Pitt Bridge Works, Pittsburg, Pa., (aa) $23,309, (bb) $12,511; (D) Milwaukee Bridge Co., Milwaukee, Wis., (aa) $24,110, (bb) $1,850; (E) Modern Steel Structural Co., Waukesha, Wis., (aa) $25,207, (bb) $1,587; (F) Wisconsin Bridge & Iron Co., Chicago, (aa) $24,900, (bb) $12,500; (G) Charles Volkmann & Co., Chicago, (aa) $24,725, (bb) $13,300; (H) Penn Bridge Co., Beaver Falls, Pa., (aa) $24,800, (bb) $13,430; (I) Worden-Allen Co., Chicago, (aa) $25,442, (bb) $13,525; (J) Strobel Steel Construction Co., Chicago, (aa) $26,684, (bb) $13,494; (K) King Bridge Co., Cleveland, Ohio, (aa) $27,100, (bb) $13,300; (L) National Contracting Co., Chicago, (aa) $26,228, (bb) $14,592:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
Extra structural steel, per lb	$0.04½	$0.037	$0.03½	$0.03¼	$0.03½	$0.04	$0.04	$0.033	$0.03¾	$0.05	$0.03½	$0.03½
Extra steel castings, per lb	.10	.05	.07	.04½	.08	.05	.05	.08	.07	.10	.05	.046
Extra iron castings, per lb	.03½	.04	.04	.02¼	.05	.04	.03½	.02½	.05	.05	.04½	.04
Total	$32,815	$33,830	$35,820	$35,960	$36,794	$37,400	$38,025	$38,230	$38,967	$40,178	$40,400	$40,820

*PRESSURE TUNNEL—New York, N. Y.—Bids were received on Jan. 7 by the Board of Water Supply for contract 36 for the construction of the north half of the Wallkill pressure tunnel, a tunnel in rock crossing under the valley of the Wallkill River, and for contract 37, for the construction of the south half of the Wallkill pressure tunnel. The work is located in the towns of New Paltz and Gardiner, Ulster County. Bids were asked for each contract separately and for both contracts combined. The bids in detail were as follows: (A) American Pipe Mfg. Co., Philadelphia, Pa.; (B) John C. Rodgers & Co., 121 W. 125th St., New York; (C) Booth & Flinn, Ltd, Pittsburg; (D) Degnon Contracting Co., 60 Wall St., New York; (E) MacArthur Bros. Co., and Mason & Hanger Co., 11 Pine St., New York and Richmond, Va.; (F) S. Pearson & Son, Inc., Long Island City, N. (G) Bradley Contracting Co., 1 Madison New York; (H) Croton Falls Constr Co., New York; (I) Rinehart & Den Washington, D. C.; (J) Gore-Meenan C Broadway, New York; (K) Arthur M n, 13 Park Row, New York:

CONTRACT 36.	(A)*	(A)**	(B)*	(C)*	(D)*	(E)*	(F)*	(G)*	(H)*	(I)**
75 lin. ft. construction shaft in earth	$300.00	$400.00	$300.00	$250.00	$200.00	$185.00	$170.00	$128.00	$300.00	$200.00
285 lin. ft. construction shaft in rock	350.00	400.00	350.00	250.00	250.00	245.00	200.00	280.00	300.00	250.00
75 lin. ft. refilling construction shaft	5.00	5.00	8.00	10.00	12.00	9.50	12.00	21.00	15.00	12.00
55 lin. ft. waterway and drainage shafts in earth	300.00	400.00	250.00	255.00	200.00	100.00	150.00	208.00	225.00	200.00
9,300 cu. yds. rock excavation in waterway and drainage shafts	15.00	15.00	14.30	15.00	12.00	14.00	14.00	17.00	18.00	15.00
125,500 cu. yds. excavation of pressure tunnel and drainage drift	6.00	6.20	6.00	6.10	6.00	6.40	6.00	6.70	7.00	6.50
300 sq. yds. additional trimming in shafts, tunnel and drift	5.00	5.00	3.00	3.00	10.00	8.00	8.00	5.60	8.00	8.00
600,000 lbs. furnishing structural steel roof support	.04	.04	.03	.03	.04	.05½	.06¼	.04	.05	.03
600,000 lbs. erecting structural steel roof support	.01	.01	.04	.03	.04	.03	.01	.02	.04	.02
60 M. ft. B. M. temporary timbering	80.00	80.00	80.00	80.00	80.00	70.00	75.00	70.00	100.00	60.00
200,000 mil. ft. gals. pumping from shafts and pressure tunnel during construction	.25	.25	.10	.30	.30	.10	.35	.20	.35	.30
12,850 lin. ft. sh. tun. & dr. drainage channels for shafts and pressure tunnel	2.00	2.00	2.00	2.00	2.50	2.60	2.20	2.80	2.50	2.00
825 lin. ft. of shaft forming for lining of waterway shaft and outer lining of dr. shaft	8.00	8.00	8.00	7.00	10.00	8.00	5.00	14.00	9.00	7.00
360 lin. ft. of shaft forms for lining of drainage shaft	8.00	8.00	8.00	7.00	10.00	8.00	5.00	14.00	9.00	7.00
11,675 lin. ft. of tun. & dr. form for lining of tunnel and drainage drift	3.00	3.00	3.50	2.00	4.00	5.20	5.00	4.90	5.00	2.00
5,000 cu. yds. concrete masonry in shafts	8.00	8.00	12.00	12.00	7.50	9.00	6.75	7.00	8.00	9.00
49,900 cu. yds. concrete masonry in tunnel and drainage drift	6.00	6.00	6.00	6.50	7.00	6.90	6.75	5.85	7.00	6.50
2,500 cu. yds. excess concrete masonry in shafts, tunnel and drift	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
200 cu. yds. brick masonry in shafts and tunnel	15.00	15.00	15.00	17.00	18.00	20.00	20.00	28.00	20.00	20.00
3,500 cu. yds. dry packing in pressure tunnel	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.50	4.00	2.00
17,500 sq. ft. drainage interlining in drainage shaft	.30	.30	.20	.30	.30	.32	.25	.40	.30	.30
7,500 lbs. Furnish. and erect. steel castings and erect. spec. valves in dr., dr. & sh.	.12	.12	.12	.12	.15	.16	.12	.10	.15	.15
8,500 lbs. bronze access door ard frame	1.00	1.00	.80	.75	.60	.90	.60	.75	.80	.80
60,000 lbs. structural steel interlining in drainage drift and tunnel	.08	.08	.08	.08	.08	.08	.08	.08	.10	.10
450 sq. ft. cutting channels for water-stops	2.00	2.00	2.00	2.00	2.00	1.75	1.00	3.00	2.00	2.00
415 lin. ft. lead-lined, 16-in. cast-iron pipe and specials	20.00	20.00	30.00	30.00	30.00	25.00	18.75	35.00	30.00	30.00
1,250 lin. ft. drilling 1½-in. or smaller holes in rock or masonry	.50	.50	.40	.40	.80	.50	.40	.50	.50	.50
1,250 lin. ft. drilling 1¾-in. to 2½-in. holes in rock or masonry	.60	.60	.45	.45	1.00	.60	.50	.50	.60	.60
20,000 lin. ft. steel pipe for grouting, etc	.30	.30	.20	.20	.30	.30	.25	.25	.40	.30
Miscellaneous plant and equipment for grouting (lump sum)	2,500.00	2,500.00	5,000.00	2,500.00	3,000.00	4,650.00	2,500.00	5,000.00	3,500.00	3,600.00
5 High-pressure air-compressors for grouting	300.00	300.00	300.00	600.00	500.00	300.00	350.00	300.00	600.00	500.00
5 tank grouting machines	250.00	250.00	300.00	250.00	200.00	300.00	450.00	250.00	400.00	500.00
25 grouting pads	70.00	70.00	70.00	70.00	120.00	100.00	69.00	60.00	100.00	100.00
3,500 making connections of tank grouting machines to grout pipes	1.00	1.00	1.00	.50	1.50	1.00	.83	1.00	1.00	1.00
1,000 setting grouting pads	1.00	1.00	1.00	.50	1.00	1.00	1.00	1.00	2.00	1.00
1,850 tons sand for grout	2.00	2.00	1.50	1.60	2.00	1.70	1.56	2.00	2.00	2.00
2,500 cu. yds. mixing and placing grout	4.00	4.00	5.00	4.00	6.00	7.00	10.00	3.00	6.00	4.00
8,600 cu. yds. earth excavation in open cut	.60	.60	.60	.50	1.00	.60	.75	1.00	1.00	.40
14,000 cu. yds. refilling and embanking	.50	.50	.60	.50	.50	.40	.50	.70	.75	.50
18,500 cu. yds. excavating top soil	.50	.50	.60	.50	.60	.50	.50	.55	.50	.60
17,500 cu. yds. surface dressing of earth	.40	.40	.60	.50	.50	.40	.50	.70	.75	.60
40 M. ft. B. M. timber and lumber	50.00	50.00	50.00	80.00	60.00	60.00	60.00	70.00	100.00	60.00
2,200 cu. yds. rock excavation in open cut	2.50	2.50	2.50	3.00	3.00	1.50	2.50	3.50	2.50	2.00
2,100 cu. yds. concrete masonry in open cut	7.00	7.00	6.00	5.50	8.00	7.75	7.00	8.00	7.00	7.00
175 cu. yds. reinforced concrete not in tunnel	9.00	9.00	15.00	7.00	16.00	13.00	8.00	12.00	10.00	20.00
22,000 lbs. steel for reinforcing concrete	.03	.03	.04	.04	.05	.05	.04	.03	.06	.05
2,900 lbs. miscellaneous cast-iron, wrought-iron and steel	.10	.10	.12	.12	.15	.07	.17½	.05	.10	.10
101,000 bbls. Portland cement	1.50	1.50	1.60	1.50	1.50	1.39	1.90	1.55	1.75	1.60
125,000 lbs. sulphate of alumina for waterproofing concrete, mortar or grout	.02	.02	.02½	.02½	.02	.03	.02	.03	.03	.03
10 tons cast-iron pipe and special pipe castings	100.00	100.00	10.00	80.00	120.00	100.00	90.00	100.00	100.00	100.00
3 ten-in. and smaller sluice gates	60.00	60.00	100.00	100.00	100.00	100.00	100.00	75.00	75.00	100.00
6,800 lbs. bronze pipe and miscellaneous bronze	.80	.80	1.00	1.00	.60	.90	.75	.75	1.00	.80
100 lin. ft. vitrified pipe	1.00	1.00	.75	.75	.60	.60	.75	.50	1.00	2.00
225 cu. yds. dry rubble masonry and paving	3.00	3.00	4.00	4.00	4.00	4.00	5.00	2.50	3.50	4.00
50 cu. yds. rubble masonry and paving in mortar	3.50	3.50	5.00	5.50	6.00	5.00	5.50	4.00	4.00	5.00
1,475 cu. yds. surfacing permanent roads	3.00	3.00	2.50	2.50	3.00	2.50	2.50	3.00	3.50	3.00
60 lin. ft. reinforced concrete ladders	2.00	2.00	3.50	3.00	4.00	3.00	3.00	10.00	5.00	5.00
Moving DuBois house (lump sum)	2,500.00	2,500.00	5,000.00	2,000.00	2,500.00	2,000.00	1,200.00	3,000.00	3,000.00	2,000.00
2 locker houses	1,750.00	1,750.00	2,000.00	1,500.00	1,000.00	750.00	1,270.00	1,500.00	2,000.00	1,000.00
Cleaning up (lump sum)	2,500.00	2,500.00	5,000.00	5,000.00	5,000.00	1,500.00	2,500.00	1,000.00	10,000.00	2,500.00
Totals	$1,837,505	$1,889,855	$1,861,855	$1,864,813	$1,890,540	$1,901,005	$1,906,312	$1,957,080	$2,173,975	$1,906,290

Time: 47 months. Bond required: $450,000 *Combined with bid on Contract 37. **Separate bid.

CONTRACT 37.	(C)*	(A)*	(A)**	(E)*	(D)*	(F)*	(B)*	(G)*	(H)*	(J)**	(K)**
50 lin. ft. construction shafts in earth	$250.00	$300.00	$300.00	$185.00	$200.00	$170.00	$300.00	$128.00	$300.00	$100.00	$210.00
660 lin. ft. construction shafts in rock	250.00	350.00	350.00	245.00	250.00	200.00	350.00	280.00	300.00	225.00	290.00
50 lin. ft. refilling construction shafts	10.00	5.00	5.00	8.00	12.00	12.00	8.00	21.00	15.00	10.00	20.00
50 lin. ft. waterway shaft in earth	255.00	300.00	300.00	74.00	200.00	150.00	250.00	208.00	225.00	150.00	300.00
3,700 cu. yds. rock excavation in waterway shaft	15.00	15.00	15.00	14.00	12.00	14.00	20.00	17.00	18.00	15.00	30.00
127,500 cu. yds. excavation of pressure tunnel	6.10	6.00	6.00	6.40	6.00	6.00	6.00	6.70	7.00	6.20	6.00
300 sq. yds. additional trimming in shafts and tunnel	3.00	5.00	5.00	8.00	10.00	8.00	3.00	5.60	8.00	8.00	3.00
615,000 lbs. furnishing structural steel roof support	.03	.04	.04	.05	.04	.06¼	.03	.04	.05	.04	.04
615,000 lbs. erecting structural steel roof support	.03	.01	.01	.02½	.04	.01	.04	.02	.04	.03	.01
65 M. ft. B. M. temporary timbering	80.00	80.00	80.00	60.00	80.00	75.00	80.00	70.00	100.00	60.00	60.00
200,000 mil. ft. gals. pumping from shafts and pressure tunnel during construction	.30	.25	.25	.10	.30	.35	.10	.20	.35	.30	.35
12,900 lin. ft. sh. & tun. drainage channels for shafts and pressure tunnel	2.00	2.00	2.00	2.40	2.50	2.20	2.00	2.80	2.50	2.50	2.00
395 lin. ft. of shaft forms for lining of waterway shaft	7.00	8.00	8.00	8.00	10.00	5.00	8.00	14.00	9.00	8.00	10.00
11,800 lin. ft. of tun. forms for lining of tunnel	3.00	3.00	3.00	5.20	4.00	5.00	3.50	4.90	5.00	3.60	3.50
2,800 cu. yds. concrete masonry in shafts	12.00	8.00	8.00	8.30	7.50	6.75	12.00	7.00	8.00	8.00	8.00
50,500 cu. yds. concrete masonry in tunnel	6.50	6.00	6.00	6.90	7.00	6.75	6.00	5.85	7.00	7.40	6.50
2,500 cu. yds. excess concrete masonry in shafts and tunnel	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
200 cu. yds. brick masonry in shafts and tunnel	17.00	15.00	15.00	17.50	18.00	20.00	15.00	28.00	20.00	20.00	20.00
3,500 cu. yds. dry packing in pressure tunnel	3.00	3.00	3.00	2.40	3.00	3.00	3.00	2.50	4.00	3.00	4.00
1,250 lin. ft. drilling 1½-in. or smaller holes in rock or masonry	.40	.50	.50	.50	.80	.40	.40	.50	.50	.40	.40
1,250 lin. ft. drilling 1¾-in. to 2½-in. holes in rock or masonry	.45	.60	.60	.60	1.00	.50	.45	.50	.60	.50	.50
20,000 lin. ft. steel pipe for grouting, etc	.20	.30	.30	.30	.30	.25	.20	.25	.40	.25	.30
Miscellaneous plant and equipment for grouting (lump sum)	2,500.00	2,500.00	2,500.00	4.650.00	3,000.00	2,500.00	5,000.00	5,000.00	3,5000.00	5,000.00	2,500.00
5 high-pressure air-compressors for grouting	600.00	300.00	300.00	300.00	500.00	350.00	300.00	300.00	600.00	300.00	500.00
5 tank grouting machines	250.00	250.00	250.00	300.00	200.00	450.00	300.00	250.00	400.00	300.00	300.00
25 grouting pads	70.00	70.00	70.00	100.00	120.00	69.00	75.00	60.00	100.00	70.00	150.00
3,500 making connections of tank grouting machines to grout pipes	.50	1.00	1.00	1.00	1.50	.83	1.00	1.00	1.00	1.00	1.00
1,000 setting grouting pads	.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00
1,850 tons sand for grout	1.60	2.00	2.00	1.75	2.00	1.56	1.50	2.00	2.00	2.00	2.50
2,600 cu. yds. mixing and placing grout	4.00	4.00	4.00	7.20	6.00	10.00	5.00	3.00	7.00	8.00	6.00
3,600 cu. yds. excavation in open cut	.50	.60	.60	.60	1.00	.75	.60	1.00	1.00	.50	.35
11,000 cu. yds. refilling and embanking	.50	.50	.50	.40	.50	.50	.60	.70	.75	.50	.60
8,700 cu. yds. excavating top-soil	.50	.50	.50	.50	.60	.50	.60	.55	.50	.50	.40
13,500 cu. yds. surface dressing of earth	.50	.40	.40	.50	.50	.50	.60	.70	.75	.50	.60
5 M. ft. B. M. timber and lumber	80.00	50.00	50.00	56.00	60.00	60.00	50.00	70.00	100.00	60.00	50.00
1,450 cu. yds. concrete masonry in open cut	5.50	7.00	7.00	7.00	8.00	7.00	6.00	8.00	6.00	7.00	6.00
125 cu. yds. reinforced concrete not in tunnel	10.00	9.00	9.00	12.00	16.00	8.00	15.00	12.00	10.00	15.00	8.00
22,000 lbs. steel for reinforcing concrete	.04	.03	.03	.05	.05	.04	.04	.03	.06	.05	.04
200 lbs. miscellaneous cast iron, wrought iron and steel	.12	.10	.10	.07	.15	.17½	.12	.05	.10	.10	.10
98,000 bbls. Portland cement	1.50	1.50	1.50	1.39	1.50	1.90	1.60	1.55	1.75	1.50	1.50
121,000 lbs. sulphate of alumina for waterproofing concrete, mortar or grout	.02½	.02	.02	.03	.02	.02	.02½	.03	.03	.03	.03
10 tons cast-iron pipe and special pipe castings	80.00	100.00	100.00	100.00	120.00	90.00	100.00	100.00	100.00	100.00	80.00
1 10-in. or smaller sluice gate	100.00	60.00	60.00	100.00	100.00	100.00	100.00	75.00	75.00	100.00	75.00
1,300 lbs. bronze pipe and miscellaneous bronze	1.00	.80	.80	.90	.60	.75	1.00	.75	1.00	1.00	.80
100 lin. ft. vitrified pipe	.75	1.00	1.00	.60	.60	.75	.75	.50	1.00	.50	1.50
50 cu. yds. dry rubble masonry and paving	4.00	3.00	3.00	4.00	4.00	5.00	4.00	2.50	3.50	4.00	4.00
50 cu. yds. rubble masonry and paving in mortar	5.50	3.50	3.50	5.00	6.00	5.50	5.00	4.00	4.00	6.00	5.00
275 cu. yds. surfacing permanent roads	2.50	3.00	3.00	2.50	3.00	2.50	2.50	3.00	3.50	3.00	2.50
25 lin. ft reinforced concrete ladders	3.00	2.00	2.00	3.00	4.00	3.00	3.50	10.00	5.00	4.00	10.00
3 locker houses	1,500.00	1,750.00	1,750.00	750.00	1,000.00	1,270.00	2,000.00	1,500.00	2,000.00	1,000.00	1,5[illegible]0.00
Cleaning up (lump sum)	5,000.00	2,500.00	2,500.00	1,500.00	5,000.00	2,500.00	5,000.00	1,000.00	10,000.00	5,000.00	3,[illegible]0.00
Totals	$1,795,354	$1,803,120	$1,803,120	$1,823,674	$1,832,285	$1,835,466	$1,838,456	$1,874,960	$2,095,512	$1,852,425	$1,88[illegible],622

Time: 47 months. Bond required: $450,000. *Combined with bid on Contract 36. **Separate bid.

MISCELLANEOUS CONTRACTS.

(Continued from page 31.)

DRAINAGE CANAL.—Oklahoma City, Okla. —Preliminary survey will be started next month for drainage canal to prevent overflow of Deep Fork of Canadian River. J. B. Thoburn, W. J. Arthur and A. M. Gustin, of Oklahoma City, are a committee representing interested property owners.

WOODEN TUG.—Detroit, Mich.—Bids were received as follows on Jan. 21 by Lieut.-Col. C. McD. Townsend, Corps Engrs., U. S. A., for building and furnishing wooden tug: Frances [illegible] Payment, Sault Ste Marie, Mich., $7,668; Reiholdt, Wolter & Co., Sturgeon Bay, Wis., $7,700; James Pullar & Robert H. [illegible], Sault Ste. Marie, Mich., $8,479; M. P. McDonagh, Seaford, Del., $11,144; Racine Boat Mfg. Co., Muskegon, Mich., $11,500; Walter H. Oades, Detroit, Mich., $13,600.

UNDER-DRAINAGE OF SLOPES.—Baltimore, Md.—Bids are asked until 11 a. m. Feb. 3, by the Board of Awards for the under-drainage of slopes on Hughes and Covington Sts. sides of Federal Hill Park, and repairing a retaining wall on Battery Ave., Federal Hill Park, and the installation of an electric lighting system around the swimming pool, men and women's gymnasium, running track, and along the mall in Patterson Park. J. Barry Fahool is Pres. Bd.

FIRE HOSE, ETC.—Homestead, Pa.—Bids are asked until 7.30 p. m., Feb. 1, by Andrew Hill, Boro. Clk., for furnishing the following supplies and material for the Fire Department: 2,000 ft. of double-jacketed 2½-in. rubber-lined cotton fire hose and 300 ft. of 1½-in. rubber-lined cotton fire hose, both to be tested and guaranteed to 400 lbs. pressure to the square inch and guaranteed for five years; four Halloway fire extinguishers; two Larken Siamese from two streams to one; two Larken Siamese from one stream to two; 12 Larken hose or ladder straps; 12 Larken hose spanners; one Larken hose relief valve; two Larken fire axes; two Larken fire lanterns; one deluge set, to be either Eastman or Hart.

AMMUNITION.—Washington, D. C.—Bids were received as follows on Jan. 22 by the Chief of Ordnance, War Dept., Washington, D. C., for furnishing (a) 10,000 2.95 solid steel shot, and (b) 60,000 one-pounder common shell: E. W. Bliss Mfg. Co., Brooklyn, (a) 97.5 cts. each; Midvale Steel Co., Philadelphia, (a) $2.50, (b) $1.50; Richmond Iron Works, Richmond, Va., (a) 94.75 cts. each; Cowdray Machine Works, Pittsburg, Pa., (a) 90 cts; Scovell Co., Waterbury, Conn., (b) 36⅝ cts.; Bethlehem Steel Co., South Bethlehem, Pa., (a) 95.5 cts., (b) design A, 35 cts.; B, 43 cts.; Mobile Stove & Pulley Mfg. Co., Mobile, Ala., (a) 98 cts.; American & British Mfg. Co., Bridgeport, Conn., (a) 96 cts., (b) 39 cts.

SUPPLIES.—Washington, D. C.—Bids are asked by the Bureau of Supplies and Accounts, Navy Dept., until Feb. 2 for (Schedule 811) electric motor, drill press, two engine lathes, one 24-in. swing and one 18-in. swing, crank shaper, milling machine, universal grinder, sensitive drill press, lathe engine, bench lathe, combination grinding, buffing and polishing machine. Also until Feb. 9—Mare Island, Cal.—for (Schedule 797) three electrically-driven bench drills, a motor-driven lathe, screw-cutting lathe, alternating-current buffing lathe, cold metal cutting-off saw, automatic saw grinder, motor-driven tool grinder, universal tool and cutter grinder, engraving machine, a No. 4 high-power universal milling machine, one shaper, two motor-driven tool grinders, drill press, electric tool post grinder, six non-reversible pneumatic drills, two independent and two universal chucks, etc. Scheudule 813, a complete equipment for forging steel lathe and planer, tools, etc.

TILE DRAIN.—Jefferson, Iowa.—Bids were received on Jan. 15 by the Joint Board of Supervisors of Greene and Boone Counties for constructing a drain tile ditch. Contracts were awarded to IOWA PIPE & TILE CO., Des Moines, Iowa; and MODERN CONSTRUCTION CO., Grand Junction, Iowa. Bids are asked for construction of drains in Greene County as follows, until noon, Feb. 2, for Drain No. 30; until noon, Feb. 3, for Drain No. 27; until noon, Feb. 15, for Drain No. 25; until noon, Feb. 16, for Drain No. 26. Estimates of quantities, specifications, etc., are on file at office of Engineering News, New York. H. W. Thomson is Engr., Grand Junction, Iowa. E. S. Gose, County Audr., Jefferson.

SUBWAY.—New York, N. Y.—The Appellate Division of the Supreme Court granted recently the application of the Public Service Commission for an extension of time until Oct. 15, 1911, to begin work on the Broadway-Lexington Ave. subway. The previous ruling made it necessary to begin work before Jan. 25 to make valid the consent for the construction of the subway. The proposed route is from the Battery at the southern end of Manhattan Island, north through Greenwich and Vesey Sts. and Broadway to Ninth St., thence under private property and streets to Irving Pl., following that street and Lexington Ave. to the Harlem River to 138th St., where it divides into two branches; one going north through Mott, River and Jerome Aves. and the other northeast through 138th St., Southern Boulevard and Westchester Ave. to Pelham Bay Park.

*DREDGING. — Bridgeport, Conn. — Bids were received on Jan. 23 by Maj. Harry Taylor, Corps Engrs., U. S. A., New London, Conn., for dredging in Bridgeport Harbor. Following are the bids per cu. yd. for (one contract), (a) 393,000 cu. yds. channel dredging, (b) 885,000 cu. yds. basin dredging; (two contracts) (c) 393,000 cu. yds. channel, (d) 885,000 cu. yds. basin: J. S. Packard Dredging Co., 31 Market St., Providence, R. I., (c) .1589 cts., (d) .1194 cts.; Atlantic Dredging Co., 515 Franklin Park Bldg., Philadelphia, Pa., (d) 16 9/10 cts.; P. Sanford Ross, Inc., 277 Washington St., Jersey City, N. J., (a) 10 9/10 cts., (b) 10 9/10 cts., (c) 14 4/10 cts., (d) 9 4/10 cts.; American Dredging Co., Philadelphia, Pa., (a) 12½ cts.; (b) 8⅔ cts., (d) 8 8/10 cts.; Taylor Dredging Co., 21 State St., New York, N. Y., (a) 12 cts., (b) 12 cts.; Newark Meadows Improvement Co., 62 Cedar St., New York, N. Y., (a) 19½ cts., (b) 14½ cts., (c) 20 cts., (d) 15 cts.; Maryland Dredging & Contracting Co., 803 Fidelity Bldg., Baltimore, Md., (a) 11 4/10 cts., (b) 9 7/10 cts.; The International Contracting Co., 17 Battery Pl., New York, N. Y., (a) 15 cts., (b) 15 cts., (c) 15 cts., (d) 15 cts.; Maritime Dredging Co., 78 Broad St., New York, N. Y., (a) 16⅔ cts., (b) 16⅔ cts., (c) 19 cts., (d) 16 cts.; Coastwise Dredging Co., Bank of Commerce Bldg., Norfolk, Va., (a) 12 cts., (b) 14 cts.; Morris & Cumings Dredging Co., 17 State St., New York, N. Y., (a) 20 cts., (b) 12 cts.; John P. Randerson, 755 Madison Ave., Albany, N. Y., (a) 14 cts., (b) 11¾ cts., (c) 15 cts., (d) 12 cts.; The W. H. Beard Dredging Co., 21 State St., New York, N. Y., (a) 14 9/10 cts., (b) 14 9/10 cts., (c) 20 cts., (d) 12 7/10 cts.

U. S. POSSESSIONS AND CUBA.

(* *denotes that this work is advertised in Engineering News.*)

ELECTRIC FUSES.—Panama.—Bids were received as follows on Jan. 25 at the office of the Isthmian Canal Commission, Washington, D. C., for 525,000 electric fuses, double strength, from 2 ft. to 60 ft. long: Star Electric Fuze Works, Wilkes-Barre, Pa., $153,998; 305 days. Aetna Powder Co., 143 Dearborn St., Chicago, $36,559; 160 days. E. I. du Pont de Nemours Powder Co., Wilmington, Del., $91,858; delivered by June 1, 1909.

ENGINEERING SUPPLIES.—Panama.—The Isthmian Canal Commission, Washington, has made the following awards for machinery to be used in the construction of the Canal: WILLIAM CRAMP & SONS SHIP & ENGINE BUILDING CO., Philadelphia, four steel dump barges, at $17,900 each. AMERICAN SHIP WINDLASS CO., Providence, R. I., twelve towing machines, at total of $21,875. CLEVELAND CRANE & ENGINEERING CO., Cleveland, Ohio, three rapid unloading cranes, $42,417.

RAILWAY SUPPLIES. — Panama. — Bids were received as follows on Jan. 26 by the Isthmian Canal Commission, Washington, D. C., for railway supplies, as follows: (a) 7,200 gross tons steel rails, (b) 35,100 angle bars, (c) 244,000 tie plates, (d) 600,000 lbs. spikes, (e) 200,000 cross ties: Bethlehem Steel Co., South Bethlehem, Pa., (a) $228,960, (b) $13,433; R. C. Hoffman & Co., Baltimore, (a) $218,693, (b) $12,218, (c) $13,418, (d) $11,640; Lackawanna Steel Co., 2 Rector St., New York, (a) $226,440, (b) $12,605; J. B. Kendall Co., Washington, (d) $11,334; Motley, Green & Co., New York, (d) $11,535; Pittsburg Forge & Iron Co., Pittsburg, (b) $14,452; U. S. Steel Products Export Co., New York, (a) $223,200, (b) $12,640, (c) $13,161, (d) $10,440; American Creosote Works, New Orleans, (e) $190,000, $180,000; A. S. Bason & Sons, Savannah, Ga., (e) $164,000, $156,000; G. Elias & Bro., Buffalo, N. Y., (e) $159,500; American Tie & Timber Co., New York, (e) $148,500; G. S. Baxter & Co., 15 William St., New York, (e) $141,700; D. L. Gillespie & Co., Pittsburg, (e) $154,500; Gulfport Creosoting Co., Gulfport, Miss, (e) $264,000; L. J. Merriman, Wilmington, N. C., (e) $157,350.

CIVIL SERVICE EXAMINATIONS.

ASSISTANT BACTERIOLOGIST. — Washington, D. C.—The U. S. Civil Service Commission announces an examination on Feb. 24-25 to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Assistant Bacteriologist in the Bureau of Chemistry, Department of Agriculture, at salaries ranging from $1,200 to $1,800 a year. Age limit, 20 years. Application Form 1312.

TOPOGRAPHIC AID.—Washington, D. C. —The U. S. Civil Service Commission announces an examination on Feb. 24-25 to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Topographic Aid in the Geological Survey, at salaries ranging from $840 to $1,200 a year, depending upon the experience and ability of the applicant, and in other branches of the service. Age limit, 20 to 30 years. Application Form 1312.

COMPUTER.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Feb. 24-25 to secure eligibles from which to make certification to fill a vacancy in the position of Computer (male), at $1,600 a year, in the office of the Supervising Architect, Treasury Department, and vacancies requiring similar qualifications as they may occur in that office. Age limit, 20 years. Application Form 1312. Applications must be filed prior to closing hour on Feb. 13.

JUNIOR CHEMIST.—Washington, D. C.—The U. S. Civil Service Commission announces an examination to secure eligibles from which to make certification to fill several vacancies in the position of Junior Chemist in the Geological Survey, at salaries of from $1,020 to $1,380 a year, and vacancies requiring similar qualifications as they may accur in that Survey. Applicants for this examination will be examined on or before Feb. 24. In order to secure eligibles with as little delay as possible the Commission will, upon the receipt of applications, examine each applicant as soon as the necessary arrangements can be made, no such examination to be held after Feb. 24. Persons who desire to be examined should file their applications with the Commission on as early a date as possible. Age limit, 21 years. Application Form 1312.

INDUSTRIAL NOTES.

THE HYDREX FELT & ENGINEERING CO., manufacturers of "Hydrex" waterproofing products, will hereafter be represented in Mexico by Ernest O. Heinsdorf, Apartado No. 939, Avenida del 5 de Mayo 23, Mexico City. Mr. Heinsdorf will carry a complete stock of the "Hydrex" products at his Vera Cruz warehouse to enable him to fill orders immediately.

AN IMPORTANT CONTRACT for electrical machinery has just been closed by the Oxford Paper Co., of Rumford Falls, Me., with the Western Electric Company. The machinery purchased includes five motor-generator sets, consisting of five 500-HP., 2,300-volt induction motors, driving 330-KW., 230-volt, direct-current generators, with motor driven exciters and a thirteen panel switchboard. Power is to be taken from the line of the Rumford Falls Power Co., which is increasing its plant for that purpose. Everything is of the most modern type and designed to include the latest improvements in apparatus of its class. This electrical machinery is to be used in a large, new plant which the Oxford Paper Co. is now building at its Rumford Falls mills to manufacture for its own use, bleach liquor and caustic soda by a new electrolytic process invented by Jasper Whiting, of Boston, and developed under his direction during the past three years to a point where it is said to have obtained a high degree of efficiency. The Whiting process, unlike those previously used for manufacturing the above chemicals, employs mercury as an agent and produces only chemically pure materials. It is said to be exceptionally economical as regards the use of power and to require only a minimum amount of labor in its operation. A very great saving in the cost of manufacture of pulp and paper is expected to result from the installation of this plant.

For other Proposal Advertisements see pages 47, 48, of Advertisements and Construction News page 34.

REINFORCED CONCRETE VIADUCT.

Lynchburg, Va.

Sealed proposals, addressed to the Joint Council Committee on Streets and Sewers, and endorsed "Proposals for the Construction of a Reinforced Concrete Viaduct," will be received by the Council Committee on Streets and Sewers, at the City Engineer's Office, Lynchburg, Virginia, until 2.30 p. m., of Monday, the 15th day of February, 1909, and on that day at 3 p. m. will be publicly opened and read. The entire work is to be let in one contract.

A certified check for One Thousand Dollars ($1,000.00) shall acompany each bid, and a bond for Ten Thousand Dollars, ($10,000.00) will be required for the faithful performance of the contract.

The approximate quantities are as follows:

1,600 cubic yards Excavation,
220 tons steel bars.
3,700 cubic yards Concrete,
1,040 square yards Brick Pavement.

Plans can be seen and specifications and forms of proposals and contracts obtained at the office of H. L. Shaner, Chief Engineer, Lynchburg, Virginia, upon making a deposit of Twenty-Five Dollars ($25.00). This deposit will be given back to the bidder upon the return to the Engineer of the plans and specifications in good condition.

The Committee reserves the right to reject any or all bids, should they deem it to be for the interest of the City of Lynchburg to do so.

H. L. SHANER, Chief Engineer.

STORM SEWERS.

Birmingham, Ala.

Sealed proposals will be received by the undersigned until 12 o'clock noon, February 3, 1909, at the office of the City Engineer, Birmingham, Ala., for the construction of certain storm sewer mains and branches thereto at an estimated cost of $175,000. Specifications may be obtained and plans examined at this office. Full set of plans can be obtained for $2.50. The right is reserved to reject any or all proposals.

(Signed) MAURY NICHOLSON,
City Engineer,
Birmingham, Ala.

BRICK LAYING.

Detroit, Mich.

WANTED to sub-let the laying of about one million brick at Detroit, Mich., all material will be furnished.

THE CONNERS BROS. CO.,
Lowell, Mass.

PIER.

Office of the Board of State Harbor Commissioners,
Union Depot and Ferry House,
San Francisco, Cal., January 23, 1909.

Sealed proposals or bids will be received at this office at or prior to 9:15 o'clock a. m. on Thursday, February 25, 1909, for furnishing materials and constructing Pier No. 34, on the water front of the City and County of San Francisco, in accordance with the plans and specifications prepared therefor by the Assistant State Engineer and adopted by the Board, January 18, 1909, and on file in this office, to which special reference is hereby made. The materials to be used in this work will consist of the requisite quantities of fresh cut, close grained Douglas yellow fir piles, creosoted piles, merchantable yellow fir lumber, No. 3 Port Orford cedar, staves for cylinders, band iron, Portland cement, sand, crushed rock, reinforcing material, castings, steel I-beams, steel plates and angles, bolts, rivets and spikes, car springs, steel rails and fastenings, glass, window frames, etc., all materials will be subjected to a rigid examination, and if found defective, undersize, or otherwise unsuitable or not as specified, will be condemned and must immediately be removed from the work.

No bid will be received unless it is made on the blank form furnished from this office and is accompanied either by gold coin or by a check equal to five (5) per cent. of the amount of the proposal, certified by a solvent bank in the State of California, payable to the order of the Secretary of the Board of State Harbor Commissioners, as a guarantee on the part of the successful bidder that he will, within six days after the acceptance of the bid and the award of the contract, enter into a written contract to do said work, according to the plans and specifications prepared therefor, and will also execute and file with the Board a bond in such sum as the Board may deem adequate, with a surety company to be approved by the Board, as sole surety, and conditioned for the faithful performance of such contract, nor will said bid be considered by the Board unless delivered to the Secretary, or to the Assistant Secretary, at the office of the Secretary, at or prior to 9:15 o'clock a. m., Thursday, February 25, 1909, at which time and place the bids will be opened and read and then taken under consideration until Thursday, the 11th day of March, 1909, at 9:15 o'clock a. m., after bids for the lease of said Pier No. 34 have been opened.

The Board reserves the right to reject any or all bids if deemed for the best interests of the State.

Bidders are invited to be present at the opening of the bids.

W. V. STAFFORD,
HENRY J. CROCKER,
WALTER E. DENNISON,
Board of State Harbor Commissioners.
RALPH BARKER,
Assistant State Engineer.
W. B. THORPE,
Secretary.

PUMPING PLANT.

Sealed bids for a complete pneumatic pumping plant will be received by the Board of Public Works of the City of Owosso, Michigan, up to 10.00 o'clock A. M. on the 24th day of February, 1909.

These bids should be addressed to the Board of Public Works of the City of Owosso, and marked "Bids for Pneumatic Pumping Plant." All bids in the hand of the City Clerk at said hour shall be opened, examined and publicly read at a meeting of the Board in open session on the said 24th day of February, 1909.

The work embraced and covered by the proposals shall be based on the specifications now on file in the office of the City Clerk of the City of Owosso, and includes the providing of an air compressor and receiver, and all necessary devices or appliances for installing an Air Lift in the wells, together with all necessary steam, air and water piping for the complete plant; also all the labor of installing said plant and laying of necessary water and air lines that are to be laid under ground.

Bidder shall name a lump sum for furnishing and installing the necessary equipment for the service required, and the bidder to whom the contract is awarded will be required to furnish a bond equal to the amount of the bid guaranteeing the faithful completion of the work in accordance with the specifications.

All bids shall be accompanied by a certified check, payable to the City of Owosso, Michigan, for an amount not less than 5% of the price bid and the check of any bidder to whom the work may be awarded shall become forfeited to the City of Owosso in case said bidder shall refuse to enter into a contract to carry out the terms of his bid. Check shall be made payable to the City Clerk, Owosso, Michigan.

Bidders must furnish satisfactory information regarding appliances to be furnished, stating where and by whom such appliances are employed, giving the Board an opportunity to examine same.

At least 30 days will be required by the Board to investigate different systems before contract will be entered into.

The Board reserves the right to reject any and all bids.

BOARD OF PUBLIC WORKS,
Owosso, Michigan.

WATER-WORKS SYSTEM.

NOTICE TO CONTRACTORS.

Webster, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Webster, N. Y., until 12 o'clock, noon, on the 20th day of February, 1909, for the construction of a system of waterworks, consisting of about six miles of cast iron pipe, pumping station, a small reservoir, stand pipe, power pumps and other appurtenances.

Bids will be received for the whole work, including or excluding the stand pipe and pumping equipment and separately for these.

Plans and specifications may be seen at the office of the Board or at the office of Knight & Hopkins, Engineers, Rome, N. Y. Specifications may be obtained at the office of the Board.

The Board hereby reserves and has the right to accept or reject any proposal, to contract with other than the lowest bidder, or to reject all proposals and advertise again, as in its judgment may be for the best interests of the village.

Bonds satisfactory to the Board in amount and sureties will be required of the one to whom the contract may be awarded. The sureties shall be residents of the State of New York or a Surety Company organized under the laws of and doing business in the State of New York, the latter preferred. Each bidder will state in his proposal the names and addresses of his bondsmen.

Cash or a certified check, made payable to the order of the Treasurer of the Village of Webster, N. Y., to the amount of 500 must be deposited by each bidder and accompany his bid as a guarantee that in case the contract is awarded to him he will, within seven days after notification of award, execute said contract.

Bids must be sealed and addressed to the Board of Trustees of Webster, N. Y., and marked on the outside of the envelope, enclosing them, "Proposal for Water Works."

Dated Jan. 25, 1909.

H. C. BERGH,
President;
WM. F. KITTELBERGER,
C. J. SPALL,
E. R. PAYNTZ,
C. E. HERRICK,
Trustees.

SEWER SYSTEM.

Denton, Texas, Jan. 20, 1909.

Sealed double proposals, one for the City to furnish the vitrified sewer pipe, Els, Tees, Y's, Curves, delivered f. o. b. Denton, contractor to do the remainder, and one for furnishing the material and constructing a system of sanitary sewer in the City of Denton, Texas, will be received by the Joint Committee on Sewers, till 2 o'clock p. m. of the 20th day of February, 1909, when they will be publicly opened and read. The work will consist of approximately 2,320 ft. of 15-in., 2,230 ft. 12-in., 4,265 ft. 10-in., 4,820 ft. 8-in., 32,860 ft. 6-in. diam. Sewers with 21 manholes and 68 lampholes, also a 100,000 gals. a day unit of disposal plant, requiring approximately 755 cu. yds. earth excavation, 130 cu. yds. concrete, 4,000 lbs. reinforcing steel, 500 cu. yds. screened gravel or broken rock for contact beds, and automatic apparatus for filling and emptying three beds in rotation, etc.

Form of proposal with instruction to bidders may be obtained from the City Secretary of Denton, Texas, profiles, plans, specifications and form of contract may be seen at the office of said Secretary. Each bid for work must be accompanied by a certified bank check, for a sum not less than 2% of the amount bid, payable to the City Secretary, as a guaranty of good faith of bidder. The committee reserves the usual right to reject any and all bids.

ED. F. BATES, Mayor,
Denton, Tex.
N. WERENSKIOLD, C. E.,
Dallas, Tex.

SEWER WORK.

NOTICE TO CONTRACTORS.

Niagara Falls, N. Y.

Sealed proposals will be received by the Board of Public Works of the City of Niagara Falls, N. Y., at the City Building in said City, up to Tuesday, February 9, 1909, at 7.30 o'clock p. m., for the furnishing of materials and the construction of the following work:

No. 202. A tunnel trunk sewer from the end of the present tunnel at Sugar Street to Royal Avenue and in Royal Avenue and Royal Avenue extended to Union Street.

No. 203. A sewer in Union Street from the end of the proposed tunnel to Buffalo Avenue.

All proposals must be made on blank forms, which, together with other requirements, may be obtained in the office of the City Engineer, Convention Hall, where plans and specifications of the work may be seen.

The Board reserves the right to reject any and all bids and to waive all informalities.

WALTER P. HORNE, City Clerk.
W. D. ROBBINS, City Engineer.
January 25, 1909.

WATER-WORKS AND SEWERS.

Proposals for material and labor for constructing a complete Water-Works and Sewer System for Town of Itta Bena, Miss., will be received by the Council until 2 p. m., Monday, Feb. 15, 1909. Synopsis of specifications will be mailed upon application to XAVIER A. KRAMER, Consulting Engineer, Magnolia, Miss. Plans and specifications on file at Itta Bena, Miss., and with the Engineer.

THERE WILL BE A PUBLIC HEARING by New York Harbor Line Board, 11 a. m., Feb. 4, 1909, 39 Whitehall St., New York, on application Dock Dept. of New York for modification harbor lines at southerly end Blackwell's Island, East River, N. Y. Parties interested are invited to attend. D. W. LOCKWOOD, Col. Engrs., U. S. A., Senior Member.

Situations Wanted

Mechanical and Electrical Engineers.

MECHICAL ENGINEER (35), with fifteen years' practical experience; now in charge designing and building heavy apparatus for New York concern, desires position with improved prospects where executive engineering ability and experience would be appreciated. Present salary, thirty-six hundred. Address "W. B. 4," Engineering News, New York. 4-2t

MECHANICAL ENGINEER AND DESIGNER, 32, university graduate, with fourteen years' shop and office experience in power plants, coal and ash handling machinery, heating, ventilating and plumbing of buildings, refrigerating machines, machine tools and general engineering, desires permanent position, inventive and executive ability, member of A. S. M. E., A1 references; salary, $2,000 per annum. Address "C. B. 4," Engineering News, New York. 4-1t

Civil Engineers.

GRADUATE CIVIL ENGINEER, with seventeen years' practical experience, principally on railway work of all kinds, five years as chief engineer, will be open to engagement February 1st. Wishes position as chief engineer in charge of location or construction. Will make reconnaissances and reports for railway projects. Address "I. A. 4," Engineering News, New York. 4-3t

CONSTRUCTING ENGINEER, graduate C. E., single, age 25, 4 years' experience general construction and surveys, 16 months as engineer for barge canal contractor; refers to past employers; will be in New York after Jan. 15th. Address "B. A. 1," Engineering News, New York. 4-2t

WANT POSITION with railroad about hundred miles long or with engineer private practice or contractor. Technical education and four years' fine experience. Now engineer maintenance R. R. Losation south Ohio River, and salary $125.00 to $150.00 month. BOX 175, Blytheville, Ark. 4-2t

WANTED POSITION by civil and hydraulic engineer, of sixteen years' experience on hydraulic and hydro-electric installations, water filtration, sewerage disposal, tunnels, difficult foundations reinforced concrete, etc. Thoroughly experienced to take entire charge of design and installation. Address "K. A. 4," Engineering News, New York. 4-3t

LANDSCAPE & CIVIL ENGINEER, now employed, open for situation on Feb. 1, 10 years' experience on general engineering, construction, surveys, municipal and railroad work, sewer disposal plants; will furnish full set of field instruments or will take contract engineering or surveying at present engineer in charge of large subdivisions. Address "S. B. 4," Engineering News, New York. 4-1t

CIVIL ENGINEER, University graduate, seven years' experience; last two years designing, estimating and superintending construction of reinforced-concrete buildings; desires position with contractor or architect; Philadelphia or East preferred; excellent references. Address "Z. B. 4," Engineering News, New York. 4-1t

SWEDISH GRADUATE, age 30, with eight years' experience in hydraulic engineering, especially water-power developments in America and abroad; has made complete designs and superintended construction. Address P. WAHLMAN, State Water Supply Commission, Albany, N. Y. 4-4t

Surveyors.

HYDRAULIC ENGINEER (22), I. C. S. student, western, with 20-in. Y-level outfit; 4 years' experience; very steady habits; will go anywhere as office-, level-, rod-, flag-, or chainman; irrigation, power or water supply preferred. Address "C. A. 4," Engineering News, New York. 4-4t

Draftsmen.

STRUCTURAL AND ORNAMENTAL IRON Draftsman, eight years' experience, rapid and accurate, desires position as detailer or checker. Address "X. B. 4," Engineering News, New York. 4-1t

DRAFTSMAN graduate, mechanical and construction, 7 years' experience, A1 references. Address "A. A. 4," Engineering News, New York. 4-2t

DRAFTSMAN ENGINEER, practical mechanical, nine years' experience; technical graduate; reliable references. Address "B. A. 4," Engineering News, New York. 4-1t

BRIDGE AND STRUCTURAL DRAFTSMAN of high grade ability, wants change. First-class detailer, checker and designer, on all classes of structural steel. Experienced on bridges, buildings, mine structures, etc. Results produced at minimum cost. Address "D. A. 4," Engineering News, New York. 4-3t

STRUCTURAL DRAFTSMAN; eight years' experience, detailing, checking, designing; location Philadelphia. Address "H. A. 4," Engineering News, New York. 4-1t

WANTED—By lady, position as draftsman in engineer's office; salary moderate. Address "M. 27," Engineering News, New York. 4-1t

Superintendents, Misc., etc.

REINFORCED CONCRETE and structural steel designing engineer and estimator is open for engagement. Address "Z. A. 4," Engineering News, New York. 4-2t

WANTED—Position as foreman or assistant superintendent on concrete work or water-works, have held positions as timekeeper and foreman; can give best of references as to character and ability. Address "E. A. 4," Engineering News, New York. 4-1t

YOUNG ENGINEER (30), with good experience in designing, estimating and closing contracts on structural steel and reinforced concrete work, speaking Spanish well, desires position in Mexico. A1 references. Address "Q. 4," Engineering News, 1636 Monadnock Block, Chicago. 4-5t

ENGINEER, with 8 y experience on road, sewers, drain nd building location and construc first-class references. Address " ," Engineering News, New York. 4-2t

ENGINEER wants to m hange; 4 years' experience hydro-el developments, water supply, office a ld; references. Address "F. A. 4," neering News, New York. 4-4t

MANUFACTURING POS DESIRED— Mass. Inst. Tech. 190 years' shipyard work and fore in structural shops; 1½ years' en manufacturing plant; designed built barrel shop, chemical proc plant, 120-ft. bridge, tar paper pla d machinery, special machines; ins 500 tons of castings and several ½ year superintendent of constr and design of machinery of $125, anufacturing plant; ½ year insp bridge and structural work; ½ y uperintendent of chemical plant, 200 ½ year estimating and erecting str al work; 1½ years manager of car b and repair shop; at present resid engineer on concrete dock. Address B. 4," Engineering News, New York 4-6t

Miscellaneous Wants

ENERGETIC ENGINEER Contractor desires to handle a line h will interest contractors; experie d salesman. Address "F. A. 3," Eng ering News, New York. 4-1t

WANTED—By party with established office; long experience and acquaintance in metal trades, representation in New York and eastern territory of out-of-town manufacturer. Address "B. B. 4," Engineering News, New York. 4-1t

FOR SALE

Contractor's Plant

1 Bucyrus, 65 ton Steam Shovel.
1 Bucyrus, 75 ton Steam Shovel.
1 Marion, Model 60 Steam Shovel.
1 Vulcan, Giant, Class E Steam Shovel.
1 Vulcan, Little Giant, Standard, Traction.
1 Vulcan, Little Giant, Special, Traction.
1 Locomotive, 60 ton, stand. gage, 17 x 24, 8-ft. wheel base.
2 Derrick Lighters.
11 Lambert Boiler Hoisters, with swingers; sizes, 10½ × 12, 7 × 10, 6½ × 8.
1 Lambert Cableway Engine, 7½ × 10.
1 Lambert Swinging Engine, 7½ × 10.
2 Nagle, 45 HP. Locomotive Boilers.
3 Star Wellboring Machines.
1 Iroquois Continuous Mixer on wheels.
1 Smith Mixer, No. 5, 1 yd.
2 Ransome Mixers, No. 3, ¾ yd.
1 Cameron Pump, 10 × 9 × 18, 6" suction.
4 Cameron Pumps, 6 × 5 × 7, 3" suction.
1 Pulsometer Pump, No. 9, 7" suction.
1 Pulsometer Pump, No. 5, 3" suction.
3 Snow Pumps, 3" suction.
2 Dean Pumps, 3" suction.
6 Edison Diaphragm Hand Pumps, 3" suc.
12 1¼ yd Rotary Dump Cars, 24' gage.
6 Western Wheeled Scrapers.
11 Cyclopean Concrete Buckets, 1 yd.
2 Straight Sided Bottom Dump Concrete Buckets, 1 yd.
2 Contractor's Turn Over Buckets, 2½ yd.
6 1½ ton Coal Buckets.
1 Orange Peel Bucket, 1½ yd.
1 Clam Shell Bucket, 1 yd.
12 Ingersoll-Sergeant Steam Drills, 3½.
1 Murphy, Little Champion Steam Drill.
4 U. S. Blasting Batteries.
5 Guy Derricks.
6 2-wheeled 1-man Concrete Buggies.
Derrick Chains.
Dump Carts, 2 wheeled.
Single Cart Harnesses.
Pile Driver Hammers and gins.

This plant is stored in the Bronx, New York City.

HOLBROOK, CABOT & ROLLINS CORPORATION

New York Address, Box 5, Station R
New York telephone, 4422 Melrose. 4-6teow

STEAM ENGINE

For Sale

Wetherill Corliss, R. H., 22 x 48, 250 H.P.; first class condition; price $1300.

KEYSTONE CABINET CO.
Chester, Pa.

FOR SALE.

ENGINE AND GENERATOR

One 18 and 30 × 16 Compound Ball Engine, 225 R.P.M., direct connected to a 240-KW. Stanley 60-cycle two-phase 2,300-volt generator; generator can be hanged to 1,100 volts. Both engine and generator in first-class condition, and will se for $5,500 f. o. b. cars Galveston, Texas.

BRUSH ELECTRIC LIGHT & OWER CO.,
4-4t Galveston, Texas.

"WANT"

Advertisements in ENGINEERIN EWS cost 1½ cents a word an insertion for Situations Wanted" and 3 cents a word for Situations Open" and "Miscellaneous W ts." Read them weekly—they will help yo